Welcome

Congratulations on your purchase of this Sony VAIO® computer, and welcome to the VAIO User Guide.
This User Guide provides detailed information on all aspects of using your new VAIO computer, from keyboard functions to preinstalled software programs.
In the left navigation window, click the topics you want to learn more about, and that information will be displayed in this main window.

Click here to find the latest updates and supplemental information about your computer.

Click here to view your computer's hardware specifications and software information.

Using Your VAIO Computer

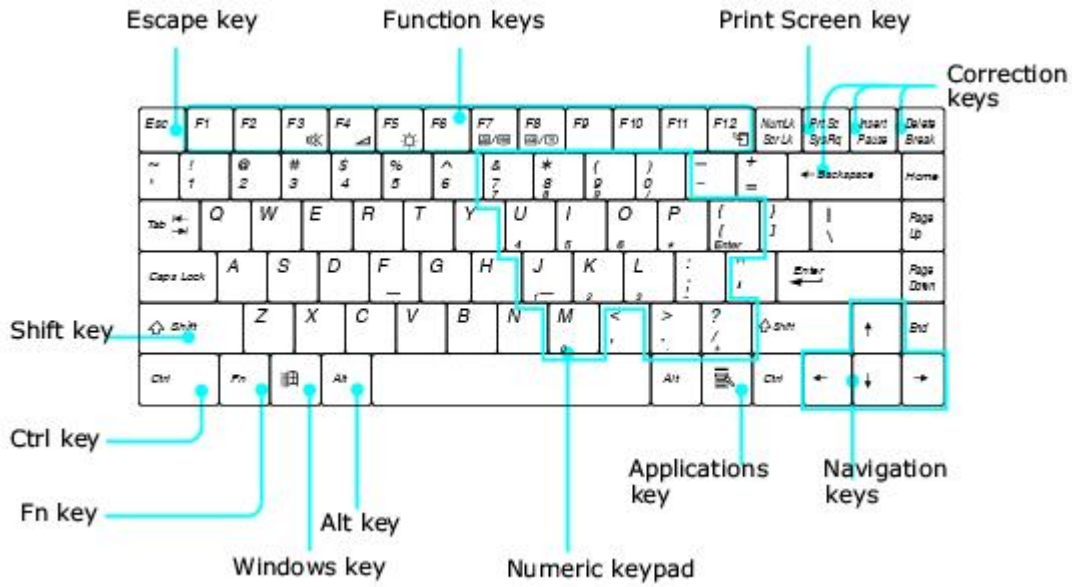
This section describes the following aspects of your new computer:

- Using the Keyboard
- Using the Touchpad
- Using the Jog Dial Control
- Using the Optical Disc Drive
- Using PC Cards
- Using Memory Stick Media
- Using the Multipurpose Bay
- Using the Floppy Disk Drive
- Using Power Saving Modes
- Connecting a Telephone Cable
- Networking With Your Computer

Using the Keyboard

Your computer's keyboard is very similar to that of a typewriter, but the keyboard has additional keys that perform specific computer-related tasks.

Keyboard



Key **Description**

Numeric keypad Contains the keys found on a typical calculator. Use the numeric keypad area to type numbers or to perform mathematical calculations such as addition and subtraction. Note that you must press the Num Lock key to activate the numeric keypad. (When you do so, the Num Lock light will be on.) Press the Num Lock key again to deactivate it.

Navigation keys The Left/Right/Up/Down arrow keys are devoted to move the cursor on the screen, and also function as the Home, End, Page Up, and Page Down keys, respectively.

Correction keys The Insert, Back Space, and Delete keys enable you to make corrections in your documents.

Function keys The 12 function keys along the top of the keyboard are used to perform designated tasks. For example, in many programs, F1 is the Help key. The task associated with each function key may vary from one application to the next.

Escape key The Esc (Escape) key is used to cancel commands.

Print Screen key The Print Screen key takes an electronic snapshot of the screen and places it in the Windows® Clipboard. You can then paste the screen shot into a document and print it.

Operator keys
(Shift, Ctrl, Alt keys) Several keys are always used with at least one other key: Ctrl, Alt, and Shift. When held down with another key, the Ctrl (Control) and Alt (Alternate) keys offer another way to give commands. For example, in many programs, instead of choosing the Save command from a menu, you can hold down Ctrl and press S (referred to as Ctrl+S). The Shift key operates the same way as on a typewriter; it is used to produce capital letters or special symbols such as @ and $.

Windows key

The key with the Windows logo displays the Windows Start menu; it is the equivalent of clicking the Start button on the taskbar. See Combinations and functions with the Windows key for more information.

Fn key The Fn key is used in combination with other keys to issue commands. See Combinations and functions with the Fn key for more information.

Applications key

The Applications key displays a shortcut menu of context-sensitive choices. Pressing this key is the equivalent of clicking the right mouse button.

Combinations and functions with the Windows key

Combination	Function
+ F1	Displays the VAIO Help and Support Center window.
+ Tab	Switches the selected button on the taskbar.
+ D	Displays the desktop.
+ E	Displays the My Computer window.
+ F	Displays the Search window to find a file or folder. This is the equivalent of selecting Search from the Start menu.
+ Ctrl + F	Displays the Search Results: Computers window where you can locate other computers. This is the equivalent of selecting Search and then Computers from the Start menu.
+ M	Minimizes all displayed windows.
Shift + + M	Returns all minimized windows to their previous size.
+ R	Displays the Run window. This is the equivalent of selecting Run from the Start menu.
Fn + + Insert	Displays the Properties window. This is the equivalent of selecting Control Panel and then System from the Start menu.

Indicators

Indicator **Function**

Power

Light is green when the power to the computer is turned on, flashes amber in Standby mode, and turns off when the computer is in Hibernate mode or powered off.

Battery

Indicates the status of the battery inserted in the battery bay.

Memory Stick

Indicates that the Memory Stick® slot is in use.

Hard disk

This indicator will light when data is being read from or written to the hard disk. Do not enter Standby mode or turn off the computer when this indicator is on.

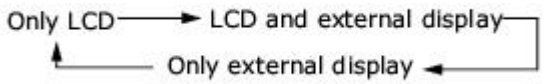
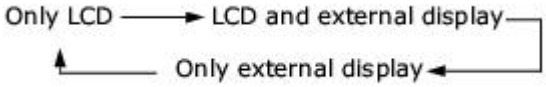
Indicator lights

Light	On	Off
Num Lock	The number keys in the numeric keypad are active. The alphanumeric character keys in the keypad area are active.	
Caps Lock	The letters appear in uppercase as you type. The Shift key lowers the case of typed letters when Caps Lock is on.	Letters appear in lower case as you type (unless you hold down the Shift key).
Scroll Lock	The screen scrolls differently. (Exactly how it scrolls depends on the specific application. It has no effect in many programs.)	Information moves across the display normally.

Combinations and functions with the Fn key

If you switch user identities during a computing session, the Fn+F7 and Fn+F8 key functionality (if available on your computer) will be interrupted. To switch to an external display or monitor, see Selecting the Display Mode for more information.

Combinations/

Feature	**Function**
Fn+ (F3) Mute On/Off	Toggles the built-in speaker off and on. A red circle appears on the Volume icon on the Windows® taskbar.
Fn+ (F4) Speaker volume	Adjusts the built-in speaker volume. To increase volume, press Fn+F4. To decrease volume, press Fn+Shift+F4.
Fn+ (F5) Brightness control	Adjusts the brightness of the LCD. To increase light intensity, press Fn+F5. To decrease light intensity, press Fn+Shift+F5.
Fn+ / (F7) Switch to the external monitor/LCD	Toggles between the LCD, external display (connected to the Monitor port) and both LCD and external display.  Select one display at a time to playback DVDs. Connect the cable before you turn on the computer; otherwise, Fn + F7 will not work.
Fn+ only/ (F8) Control AV Out	Toggles between LCD-only and dual LCD/TV display modes.  Select one display at a time to playback DVDs. Connect the cable before you turn on the computer; otherwise, Fn + F8 will not work. You cannot use the Fn + F8 function to switch between LCD and TV once a DVD is inserted into the optical disc drive.
Fn+ (F12) Standby	Puts the system into Standby mode, a power management state. To return the system to the active state, press any key.

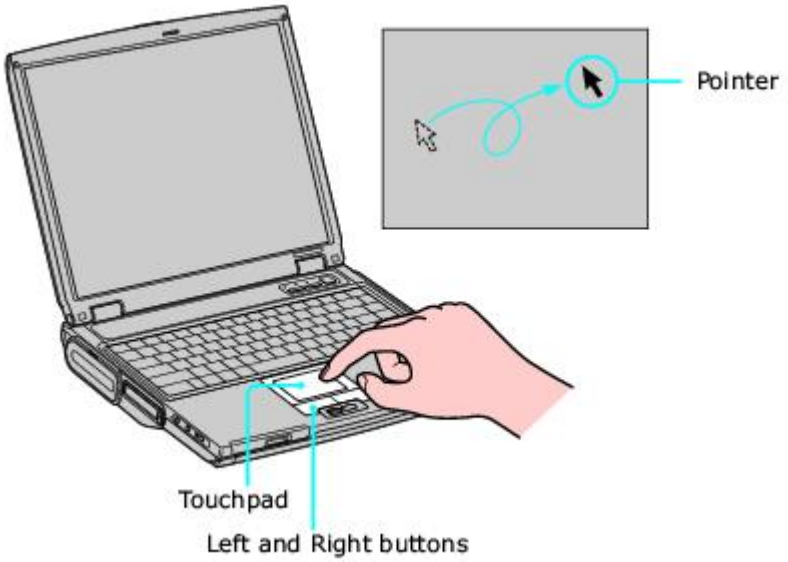
You can also carry out these functions using the Jog Dial Control. Some functions are not available until Windows®

launches.

Using the Touchpad

The keyboard contains a cursor-pointing device called a touchpad. You can point to, select, drag, and scroll objects on the screen using the built-in touchpad.

Touchpad



Action	Description
Point	Slide one finger on the touchpad to place the pointer on an item or object.
Click	Press the left button once.
Double-click	Press the left button twice.
Right-click	Press the right button once. In many programs, this action displays a shortcut menu of context-sensitive choices.
Drag	Slide one finger while pressing the left button.
Scroll	Move your finger along the right edge of the touchpad to scroll vertically. Move your finger along the bottom to scroll horizontally. (The scroll function is available only with programs that support a touchpad scroll feature.)

The Mouse Properties dialog box lets you customize your mouse and touchpad features, such as touch sensitivity, motion, and buttons.

To open the Mouse Properties dialog box

1. Click Start on the Windows® taskbar, and then Control Panel.
2. Click Printers and Other Hardware, and then Mouse. The Mouse Properties dialog box opens.

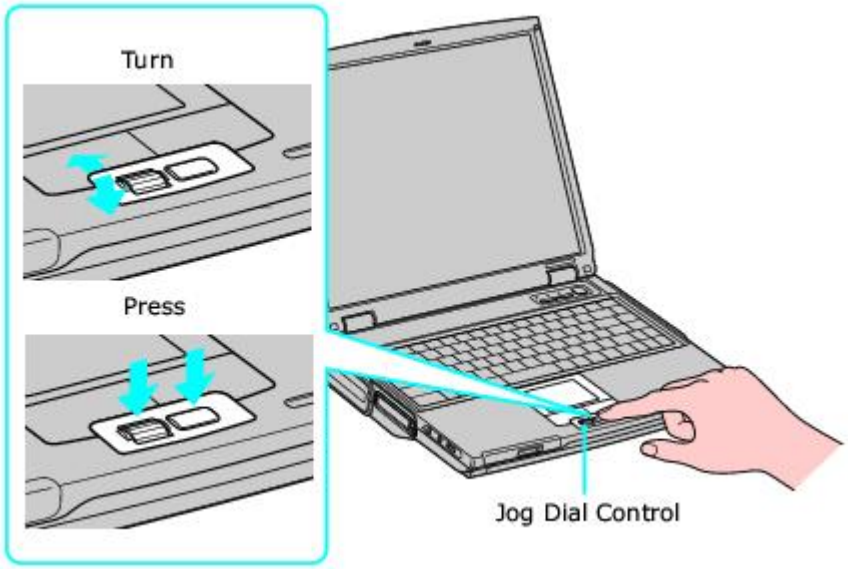
Using the Jog Dial Control

Your computer is equipped with a Jog Dial Control and Jog Dial Navigator software, which enables you to scroll through programs, folders, and documents from a predefined list. The Jog Dial Control and Jog Dial Navigator are compatible with preinstalled software programs that support Jog Dial Navigator functions.[1]

[1] Some software programs do not support Jog Dial Navigator.

Using the Jog Dial Control

Locating and Using the Jog Dial Control



To use the Jog Dial Control

- Turn the Jog Dial Control to scroll up and down a menu.
- Press the Jog Dial Control to select a menu item.
- Press the Back button (on selected models) to return to the previous menu.

If your computer does not come with a Back button, you can select Return on the Jog Dial Launcher to go back to the previous menu.

Using the Jog Dial Navigator icon

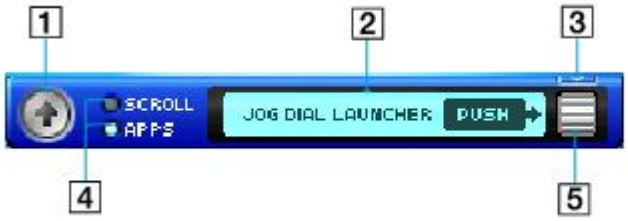
The Jog Dial Navigator icon appears on the taskbar when you turn on your computer. A second Jog Dial Navigator icon appears on the Indicate Window, when it is displayed. The arrows on the Jog Dial Navigator icon on the taskbar change to show the direction in which you are turning the Jog Dial Control. No arrows appear on the taskbar icon if the Application mode is selected, and the Jog Dial Control is not in use.

For more information about Jog Dial Navigator, right-click the Jog Dial Navigator icon on the taskbar, and click Help.

Using the Indicate Window

The Indicate Window appears as a floating window on your desktop when you use the Jog Dial Control or when you double-click the Jog Dial Navigator icon on your taskbar.

Indicate Window



Features	Function
1 Launcher button	Opens the Jog Dial Launcher.
2 LCD area	Shows program information, depending on the mode and software.
3 Close button	Closes the Indicate Window.
4 Mode buttons	Shows the current mode, Application or Scroll.
5 Jog Dial Navigator icon	Displays Jog Dial Navigator operations.

To move, hide, or close the Indicate Window

- Click and drag the Indicate Window to another location on the desktop.
- Click the Close button, and then click OK.
- Right-click the Indicate Window, and select Hide Indicate Window from the drop-down menu. To make the Indicate Window reappear, right-click the Jog Dial Navigator icon on the taskbar, and select Display Indicate Window.
- Right-click the taskbar, select Toolbars from the pop-up menu, and click Jog Dial to store the Indicate Window on the taskbar. To make the Indicate Window reappear on the desktop, right-click the taskbar, select Toolbars from the menu, and click Jog Dial to clear the selection.

If the Indicate Window is hidden behind the taskbar icons, right-click the taskbar and click Lock the Taskbar to clear the selection. Click and drag the edge of the Indicate Window to the left until it is in clear view.

Using Jog Dial Launcher

Jog Dial Launcher lists a menu of programs installed on your computer. You can use the Jog Dial Control to scroll and open these menu items.

Jog Dial Launcher

To open Jog Dial Launcher

- If the APPS mode button is selected on the Indicate Window, click the Jog Dial Navigator icon on the Indicate Window or press the Jog Dial Control.
- If the Scroll mode button is selected on the Indicate Window, click the Launcher button .

To open a menu item

1. Open Jog Dial Launcher. See To open Jog Dial Launcher.
2. Turn the Jog Dial Control until the menu item you want to select appears between the two center arrows.
3. Press the Jog Dial Control.
4. Repeat steps 2 and 3 as necessary to open a program.

If your computer does not come with a Back button, you can select Return on the Jog Dial Launcher to go back to the previous menu.

Using Application and Scroll modes

Jog Dial Navigator operates in one of two modes: Scroll or Application. Once an application is open, you can easily switch modes.

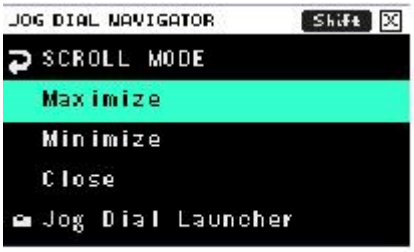
Mode	Description
Application	Enables you to navigate through a menu of programs installed on your computer.
Scroll	Enables you to scroll through an active window with a scroll option.

Selecting Application mode

To select Application mode, click APPS on the Indicate Window. When you select Application mode, the Jog Dial Guide or Jog Dial Navigator window appears, depending on the program.

Jog Dial Guide

Jog Dial Navigator



Windows	Descriptions
Jog Dial Guide	Appears when a program that supports Jog Dial Navigator has audio features, such as volume control.
Jog Dial Navigator	Appears when a program that supports Jog Dial Navigator is active.

When using a program that has audio features, you can switch Application mode windows by pressing the Jog Dial Control and holding it until the window changes.

Selecting Scroll mode

No windows appear when you select the Scroll mode. Simply turn the Jog Dial Control and the active window will scroll up and down or side to side if it has a scroll option.

To select Scroll mode

- Click SCROLL on the Indicate Window.
- On the Application mode window, select SCROLL MODE and push the Jog Dial Control.

Selecting Scroll Mode

Changing Jog Dial Navigator settings

You can change the Jog Dial Navigator settings to modify the Jog Dial Navigator functionality and appearance.

To change settings

1. Right-click the Jog Dial Navigator icon on the taskbar. A pop-up menu appears.
2. Select Jog Dial Setting. The Jog Dial Setting window appears.
3. Make your changes, and click OK.

For information about Jog Dial settings, right-click the Jog Dial Navigator icon on the taskbar, and click Help.

Using the Optical Disc Drive

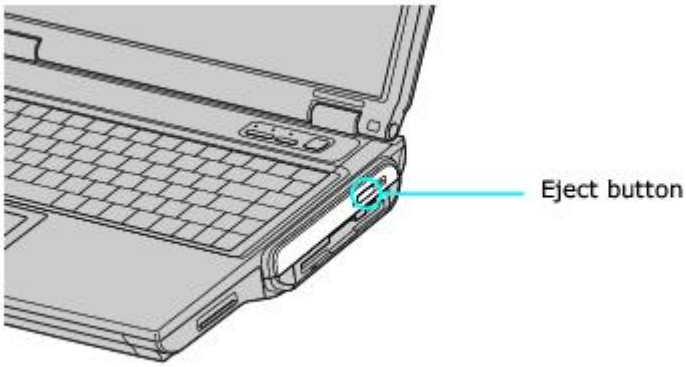
Your computer comes with an optical disc drive. For information on the particular drive installed on your computer, see Welcome to view your VAIO® Specifications.

Inserting a disc

When the computer is in Standby or Hibernate mode, you cannot insert a disc. See Controlling Power Consumption for more information on Standby and Hibernate modes.

1. Turn on the computer.
2. Press the Eject button to open the optical disc drive. The tray slides out.

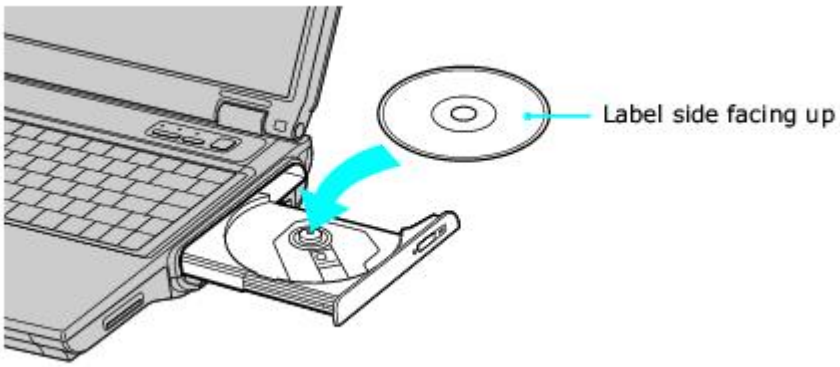
Ejecting the Tray



Avoid using adhesive labels to identify your discs. Adhesive labels may come off while the disc is in use in your optical disc drive and may cause damage to the unit.

3. Place an optical disc on the tray with the label side facing up. For DVDs that can played on both sides, the side of the disc facing up is the side that plays.
4. Press the disc onto the hub until the disc clicks securely into place.

Inserting an Optical Disc



Make sure to seat the disc firmly over the hub fingers. If you do not seat the disc firmly, you could damage your optical disc drive, and you may not be able to open the tray.

5. Push the tray gently to close it.

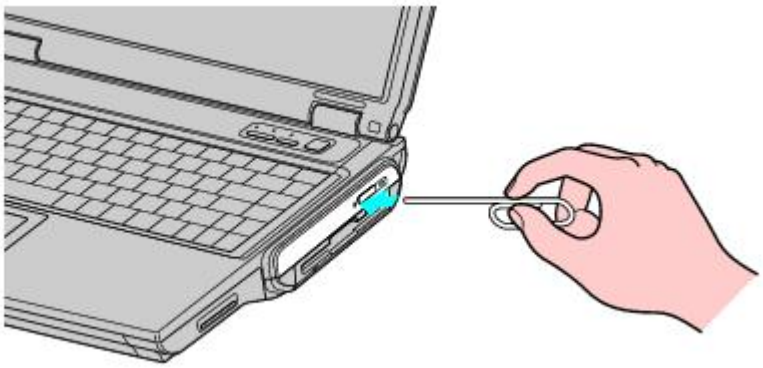
Ejecting a disc

When the computer is in Standby or Hibernate mode, you cannot eject a disc. See Controlling Power Consumption for more information on Standby and Hibernate modes.

1. Close all open applications and wait for the LED indicator to turn off.

2. Press the Eject button to open the optical disc drive. The tray slides out. If the tray does not slide out when you press the Eject button, turn off the computer and insert a thin, pointed object (such as a paper clip) into the manual eject hole.

Manual Eject Hole



Playing a DVD

1. Turn your computer on. If your computer is already turned on, close any open software applications.
2. Insert the DVD into the optical disc drive. See Inserting a disc for more information.
3. Click Start on the Windows® taskbar, and select All Programs.
4. Open InterVideo WinDVD. See the WinDVD® help file for more information.

✍ Your optical disc drive can read most DVD-R media.

If you connect a TV display to your computer, you may need to adjust the display and the screen resolution. See Selecting the Display Mode and Adjusting the screen resolution for more information.

⚠ **Some discs recorded at 20 or 24 bits may produce noise while playing. If you have audio devices connected, this may cause damage to your hearing and the speakers. Reduce the volume before playing a DVD.**

You cannot use the Fn + F8 function to switch between LCD and TV once a DVD is inserted into the optical disc drive.

Do not switch between LCD and the external display while the DVD is playing. This may cause a malfunction, and you may need to restart the DVD software.

Do not switch the power saving modes while you are playing the DVD.

Change the settings to disable the screen saver and the virus checker.

Do not use memory-resident utility software to speed up disc access. This may cause the computer to malfunction.

Playing an audio CD

1. Turn your computer on. If your computer is already turned on, close any open software applications.
2. Insert the CD into the optical disc drive. See Inserting a disc for more information.
3. Click Start on the Windows® taskbar, and select All Programs.
4. Open SonicStage. See the SonicStage help file for more information.

If the CD plays but you do not hear sound, you may need to turn on the audio feature on your computer. See Troubleshooting Audio for more information.

Writing to a CD-RW or CD-R disc[1]

Before you write to a CD-RW or CD-R, read the following notes to avoid a computer malfunction and ensure the best writing results:

- Deactivate the screen saver and exit anti-virus software.
- Deactivate memory-resident disc utilities to avoid data loss.
- If your computer has preinstalled Microsoft® Office programs, such as Excel, Word, and Outlook, turn off the FindFast application.

- Connect and use the AC adapter to power your computer.
- Use CD-Rs that are compatible with 16x speed for the best results.

Your computer does not support 1x and 2x writing speed.

To set the writing speed

1. Click Start on the Windows® taskbar, and click My Computer. The My Computer window appears.
2. Right-click DVD/CD-RW Drive, and select Properties from the drop-down list. The DVD/CD-RW Drive Properties window appears.
3. Select the Recording tab. In the Desktop CD recording box, select the appropriate writing speed.
4. Click Apply, and click OK.

To write to a CD-RW or CD-R disc

1. Insert the disc into the optical disc drive. See Inserting a disc for more information.
2. Use Sony SonicStage and Microsoft® Windows® XP to write data to a CD-R or CD-RW disc.

SonicStage software is recommended for writing audio data to a disc. See the SonicStage help file for more information. For information on using the Windows® XP software, see the instructions included with that application.

To open SonicStage software

1. Click Start on the Windows® taskbar, and select All Programs.
2. Open SonicStage. See the SonicStage help file for more information.

Once you finish writing data to a CD-R that is readable in a CD-ROM drive, make sure you finish the writing process before you eject the disc. See the instructions included with the Windows® XP software for more information.

Do not strike or shake the computer while writing data to a disc.

Always use the AC adapter as the power source for your computer if you are writing data to a CD-RW or CD-R disc. Using battery power may result in data transfer failure.

To avoid writing errors, remove the compact woofer or do not play music while writing data to a CD-RW or CD-R disc.

[1] For computer models equipped with a CD-RW/DVD Combo Drive.

Notes on CD and DVD discs

- Do not drop or bend the disc.
- Do not touch the surface of the disc. Fingerprints and dust on the surface of a disc may cause reading errors. Proper care of the disc is essential to maintain its reliability. Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray, as they may cause damage to the disc.
- For normal cleaning, hold the disc by its edge and use a soft cloth to wipe the surface from the center out.
- If the disc is badly soiled, moisten a soft cloth with water, wring it out well, and use it to wipe the surface of the disc from the center out. Wipe off any remaining moisture with a dry, soft cloth.

Using PC Cards

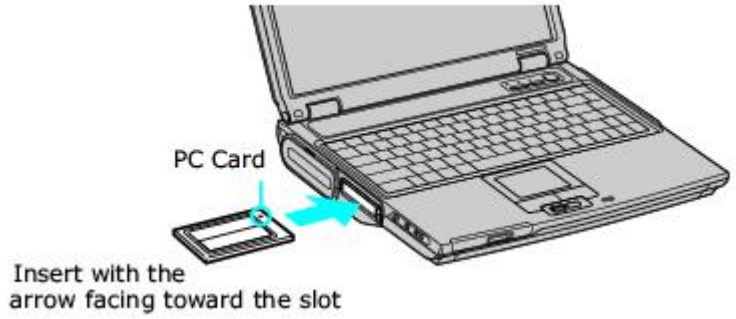
Your computer includes two PC Card slots. PC Cards enable you to connect portable external devices such as another hard disk drive, or a PC Network Interface Card (NIC) to connect to a network.

✍ The PC Card slots can accommodate two Type I/II PC Cards, or one Type III PC Card. These slots are compatible with CardBus. Use the lower slot for Type III PC Cards. You do not need to shut down your computer before inserting or removing a PC Card.

To insert a PC Card

1. Insert the PC Card into the PC Card slot. Make sure the front label of the PC Card is facing up.

Inserting a PC Card



2. Push the PC Card gently into the slot. The PC Card is automatically detected by your system.

Do not force a PC Card into the slot as this may damage the connector pins.

Do not carry your computer while touching the head of a PC Card, as pressure or shock may damage the connector pins.

To remove a PC Card

If your computer is turned on, follow these instructions. If your computer is turned off, skip to step number 5.

1. Close all software programs that use the PC Card; otherwise, data may be lost.
2. Double-click the green arrow icon in the taskbar.
3. Select an option in the Hardware devices box, and click Stop. The Stop a Hardware device window opens.
4. Click OK to confirm your selection, and then Close.
5. Press the PC Card Release button. The Release button pops out.
6. Press the PC Card Release button a second time (in some cases). Remove the card.

Notes on using PC Cards

- For some PC Cards, if you alternate between normal power operation and the Standby or Hibernate power management modes while the card is inserted, you may find that a device connected to your system is not recognized. Restart your system to correct the problem.
- Be sure to use the most recent software driver provided by the PC Card manufacturer.
- If an exclamation mark (!) appears on the Device Manager tab in the System Properties dialog box, remove the software driver and then reinstall it.
- You may not be able to use some PC Cards or some functions of the PC Card with this computer. If you have difficulty inserting a card, check that you are orienting the card correctly. See the manual that came with your PC Card for more information on its use.

Using Memory Stick Media

This compact, portable, and versatile recording medium has a data capacity exceeding that of a floppy disk. The medium is specially designed for exchanging and sharing digital data with compatible products. Because it is removable, the media can be used for external data storage.

Types of Memory Stick media

The following two types of Memory Stick media can be used with your computer:

- MagicGate [1] Memory Stick media (hereafter called MG Memory Stick media), which is provided with copyright protection
- Memory Stick[2] media, which does not have the same copyright protection as MagicGate Memory Stick media

Some music files with secure copyright protection may be stored on MG Memory Stick media but not on regular Memory Stick media.You can also use MagicGate media-compatible devices to record and playback music when they are connected to your computer.

You can store mixed data on the Memory Stick media. For example, you can copy an ordinary file onto a MG Memory Stick media that already contains music files.

What is MagicGate Memory Stick media?

MagicGate Memory Stick media provides copyright protection that consists of authentication and encryption technology. Authentication technology ensures that protected content is only transferred between compliant devices and media. Protected content is recorded and transferred in an encrypted format to prevent unauthorized duplication or playback.

MG Memory Stick media has the MG mark .

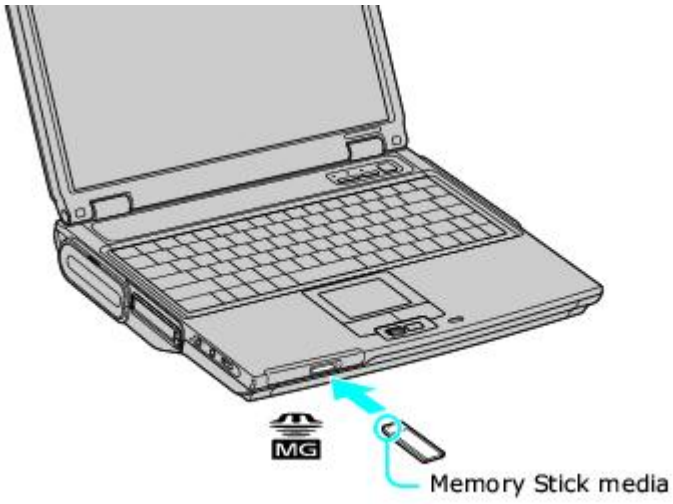
To insert Memory Stick media

1. Insert the Memory Stick media with the arrow facing up and toward the Memory Stick media slot.

   Inserting the media in the wrong direction may damage the connector pins.

2. Slide the Memory Stick media carefully into the slot until it clicks in place.

Inserting Memory Stick Media



To view the contents of Memory Stick media

1. Click Start on the Windows taskbar, and click My Computer
2. Double-click Sony Memory Stick under the Devices with Removable Storage box. The Sony Memory Stick window opens.

To remove Memory Stick media

1. Make sure the Memory Stick media indicator is off.
2. Push the Memory Stick media in toward the computer.
3. When the Memory Stick media ejects, pull it out.

✍ Be careful when removing the Memory Stick media, as it may eject completely from the slot.

[1] MagicGate Memory Stick and are trademarks of Sony Corporation.

[2] Memory Stick and are trademarks of Sony Corporation.

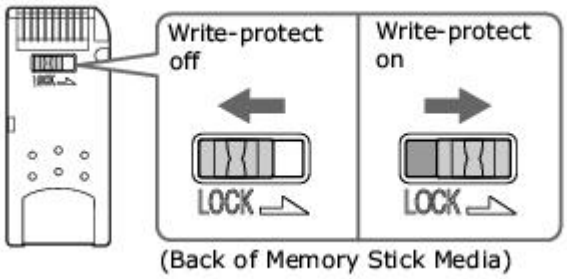
Write-protecting Memory Stick media

Memory Stick media is designed with a write-protect tab to protect valuable data from accidental erasure or overwriting. Move the tab to the right or left to set or release write-protection.

Write-protect off Data can be saved on the Memory Stick media.

Write-protect on Data can be read from but not saved on the Memory Stick media.

Using the Write-protect Tab



Formatting Memory Stick media

Memory Stick media is formatted for immediate use when you purchase it. If you need to reformat Memory Stick media, follow the procedures below.

Reformatting erases all current data that is stored on Memory Stick media. Before you reformat, confirm that the media does not contain files you want to keep.

1. Insert the Memory Stick media into the computer. See To insert Memory Stick media for more information.
2. Click Start on the Windows taskbar, and click My Computer.
3. Under Devices with Removable Storage, right-click Sony Memory Stick - MG, and select Format. The Format Sony Memory Stick - MG dialog box appears.
4. Select the appropriate options, and click Start.

Notes on using Memory Stick media

- When the write-protect tab of the Memory Stick media is set to LOCK, data cannot be recorded or erased.
- Before using Memory Stick media, back up important data.
- Wait a minimum of 10 seconds after the Memory Stick media finishes reading or writing data before removing the media.
- If the media is removed prematurely, a blue screen with an error message appears, prompting you to continue or exit. Reinsert the media into the slot and press Enter to continue. This enables the media to finish reading or writing data.
- You can view video clips that you have recorded with Memory Stick media- compatible video camera recorders.
- The media slot can accommodate one Memory Stick media at a time.
- You may copy images from a digital video camera using Memory Stick media.
- Only MagicGate Memory Stick media can be used with copyright protected data such as music.
- Copyright protected music cannot be checked-out to any Memory Stick media other than MG Memory Stick media.
- Recorded music is limited to private use only. Using recorded music for any other purpose requires permission of the copyright holders.
- Sony is not responsible for music files that cannot be recorded from a CD or downloaded from other sources.
- Formatting Memory Stick media erases all data (including music data) previously saved to it. Before you format Memory Stick media, confirm that the media does not contain files you want to keep.
- Do not use the media in locations that are subject to static electricity or electrical noise.
- Do not touch the media connector with your finger or metallic objects.
- Do not attach labels other than the supplied label to a media.
- Do not bend, drop, or apply strong shock to the media.
- Do not disassemble or modify the media.
- Do not allow the media to get wet.
- Do not use or store the media in a location that is subject to:
    - Extremely high temperatures, such as in a car parked in the sun
    - Direct sunlight
    - High humidity or places with corrosive substances
- To prolong the life of the media, use the supplied storage case. See the instructions that came with your media for more information on its use.

Using the Multipurpose Bay

You may install a variety of devices into the multipurpose bay to expand your computer's functionality. The multipurpose bay supports the removable weight saver, floppy disk drive, compact woofer, or the internal numeric keypad (Ten-Key Bay unit). You may install only one device at a time.

✍ You may install a device into and remove a device from the multipurpose bay while the computer is powered completely on or turned off. Installing and removing a device while the computer is in a power saving mode is not supported.

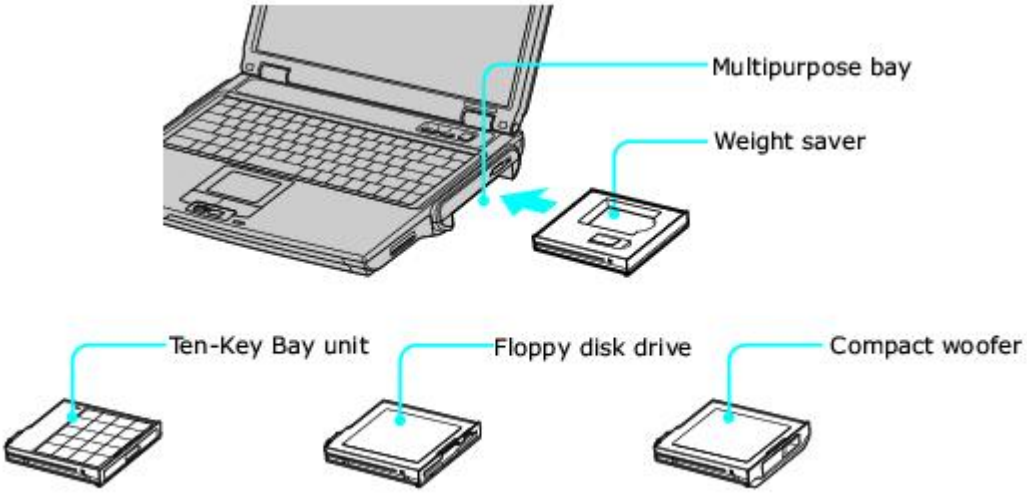
To install a device while the computer is on or off

Before you install a compact woofer, prop up the rear tilt stands on the bottom of the computer to maximize woofer performance.

1. Remove any device that is already installed in the bay. See To remove a device while the computer is off or To remove a device while the computer is on for more information.

2. Slide the device, such as the weight saver, into the multipurpose bay until it clicks into place. The computer automatically detects the installed device.

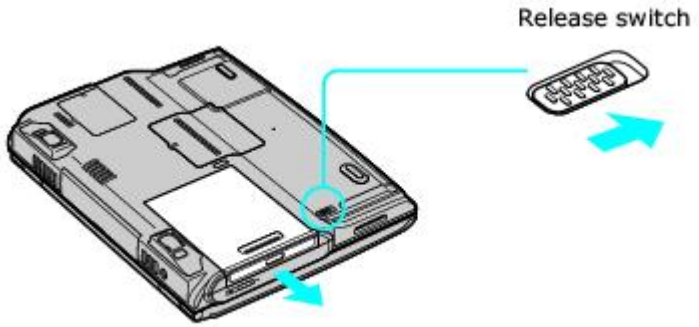
Inserting a Device



To remove a device while the computer is off

1. Slide and hold the multipurpose bay Release switch in the release position while you gently pull the device from the bay.

Multipurpose Bay Release Switch



✍ If you do not plan to install another device into the multipurpose bay, insert the supplied weigh saver to protect the bay.

To remove a device while the computer is on

✍ Before disconnecting the device, close any active programs to help prevent data loss.

1. Double-click the Safely Remove Hardware icon on the taskbar. The Safely Remove Hardware window appears.
2. In the Hardware devices box, click the device you want to remove, and click Stop. The Stop a Hardware device window appears.
3. Verify that the correct device is selected, and click OK. A message appears stating it is now safe to remove the device from the computer.
4. Slide and hold the multipurpose bay Release switch in the release position while you gently pull the device from the bay.

✍ If you do not plan to install another device into the multipurpose bay, insert the supplied weigh saver to protect the bay.

Notes on using a device in the multipurpose bay

⚠ **Do not place the compact woofer near any magnetic recording media, such as a hard disk, floppy disk, or mini disk. The woofer's magnetic field may damage the data stored on this type of media.**

- Do not use external speakers and the compact woofer at the same time. Using both devices at the same time does not enhance sound quality.

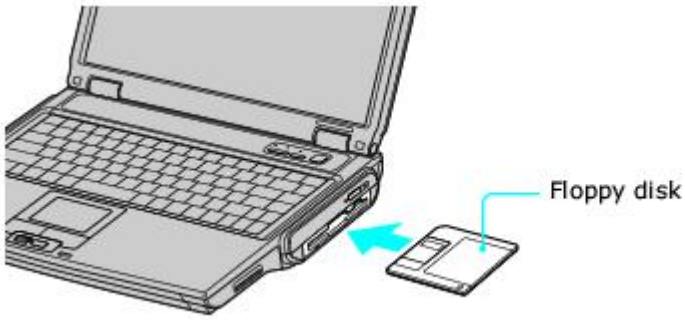
Using the Floppy Disk Drive

Whether you installed the supplied floppy disk drive into the multipurpose bay or connected an external USB floppy disk drive to the computer, you will find that both floppy disk drives are similar and easy to use.

To insert a floppy disk into the floppy disk drive

1. Hold the floppy disk with the label facing up.
2. Push the floppy disk gently into the drive until it clicks into place.

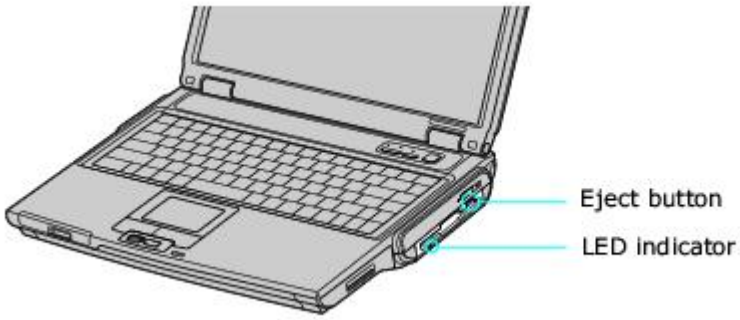
Inserting a Floppy Disk



To remove a floppy disk from the floppy disk drive

1. Close all software programs that were opened from the disk and wait for the LED indicator to turn off.

Removing a Floppy Disk



2. Push the Eject button, and remove the disk.

Do not push the Eject button when the LED indicator is turned on; otherwise, you may lose data.

Notes on handling floppy disks

- Do not open the shutter manually and touch the surface of the floppy disk.
- Keep floppy disks away from magnets.
- Keep floppy disk away from direct sunlight and other heat sources.

Using Power Saving Modes

When you use a battery as the source of power for your computer, you can take advantage of power management settings to conserve battery life. In addition to the normal operating mode, which allows you to turn off specific devices, your computer has two distinct power saving modes: Standby and Hibernate. When using battery power, be aware that the computer automatically enters Hibernate mode when the remaining battery charge drops below 5 percent, regardless of the power management setting you select.

✍ If the battery level falls below 10 percent, you should either attach the AC adapter to recharge the battery or shut down your computer and insert a fully charged battery.

Normal mode

Normal mode is the normal state of your computer when it is in use. The power indicator displays green when your computer is in this mode. To save power, you can turn off a specific device such as the LCD or the hard disk drive.

Standby mode

In Standby Mode the computer saves the current state of the system in RAM and switches off power to the CPU. The amber power indicator flashes in this mode.

To activate Standby mode

- Press the key combination Fn+F12.

To return to Normal mode

- Press any key to return to Normal mode.

Hibernate mode

In the Hibernate mode, the state of the system is saved on the hard disk drive and power is turned off. The power indicator is off in this mode.

To activate Hibernate mode

- Press the power button and release it immediately. The computer enters Hibernate mode.

Do not move the computer until its power indicator turns off.

If the computer does not activate Hibernate mode, see The power management does not respond. for more information.

To return to Normal mode

- Press the power button to return to normal mode.

Notes on power saving modes

- When returning from Hibernate mode, the system status stored on the hard disk is erased and the computer starts normally.
- Standby uses more power than Hibernate.
- Standby requires less time than Hibernate to return to normal mode.

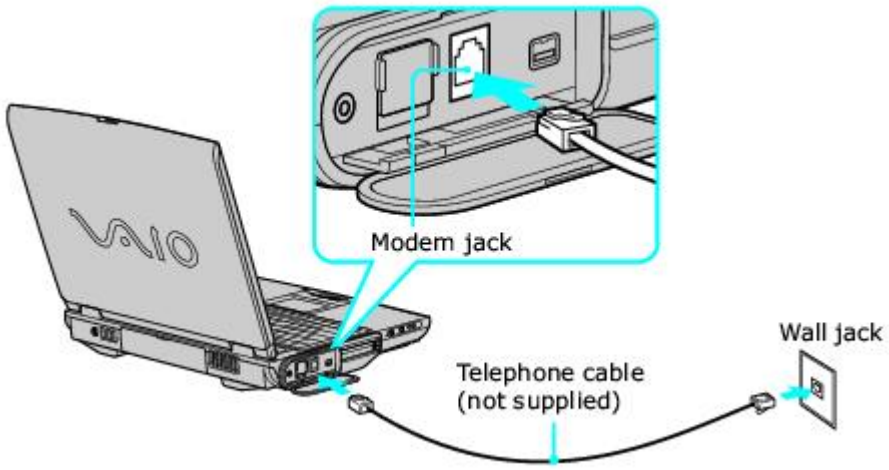
Connecting a Telephone Cable

You need to connect a telephone cable to take advantage of online services and the Internet.

✍ In order to register your Sony VAIO computer, register your software online, and use Sony Customer Support, you must connect to a telephone cable.

1. Plug one end of the telephone cable into the Modem jack on the computer.

Connecting a Telephone Cable



2. Plug the other end of the telephone cable into the wall jack.

✍ Your computer does not work with party lines, cannot be connected to a coin-operated telephone, and may not work with multiple telephone lines or a private branch exchange (PBX). Some of these connections may result in excess electrical current and could cause a malfunction in the internal modem.

If you connect a telephone cable coming through a splitter, the modem or connected device may not work properly.

Networking With Your Computer

With a Sony computer, you can easily set up or connect to a variety of networks. The Network Setup Wizard and New Connection Wizard make it easy to gain access to remote and local area networks (LANs) using these connections:

- Ethernet
- Dial-up

For more information about networking, click Start, Help and Support, and then Networking and the Web.

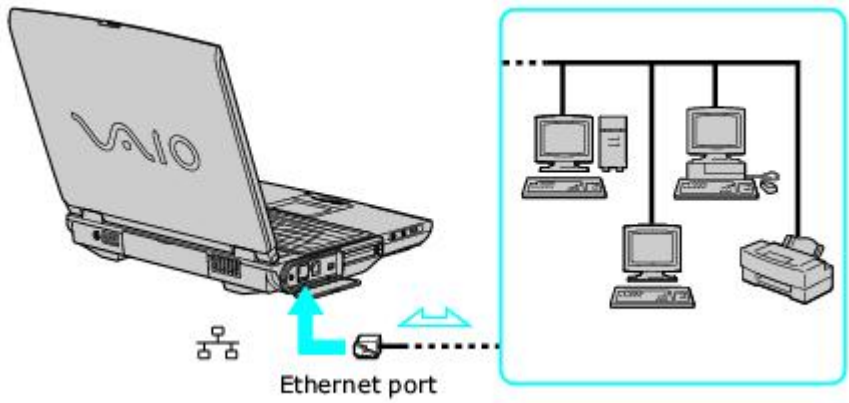
Using Ethernet and Dial-up connections

Local area networks (LANs) comprise a group of computers and associated devices within a small geographic area, such as a home or office building. For setting up LANs, Ethernet is a widely installed technology. Your computer accommodates both 10BASE-T and 100BASE-TX Ethernet connections, with data transfer speeds of between 10 and 100 Mbps, depending on the Ethernet cable.

To set up an Ethernet LAN

1. Plug one end of the Ethernet cable into your computer's Ethernet port and the other into the network connection.

Connecting an Ethernet cable



2. Click Start, point to All Programs, Accessories, Communications, and click Network Setup Wizard. The Network Setup Wizard appears.
3. Click Next.
4. Follow the on-screen instructions.

Warning: Only connect 10BASE-T and 100BASE-TX cables to the Ethernet port. Do not connect any other type of network cable or phone cable. Connecting cables other than those listed above may result in an electric current overload and could cause a malfunction, excessive heat, or fire in the port. To connect the unit to the network, contact your network administrator.

You can connect to your company network from a remote location and use data, applications, and network resources. See Microsoft® Windows® Help and Support in the Start menu for more information.

To connect to a remote network using a telephone or Ethernet cable

1. Connect your computer to an Ethernet or telephone cable. See To set up an Ethernet LAN and Connecting a Telephone Cable for more information.
2. From the Start menu, point to All Programs, Accessories, Communications, and click New Connection Wizard.
3. Click Next. If you are prompted to the Local Information dialog box, follow the on-screen instructions.
4. Click "Connect to the network at my workplace," and then click Next.
5. Follow the on-screen instructions.
6. Ask your network administrator for the detailed settings and devices needed to connect to an existing network.

Connecting Peripheral Devices

You can add functionality to your computer by connecting a variety of peripherals, as discussed in the following sections:

- Connecting a USB Device
- Connecting a USB Printer
- Connecting a Parallel Port Printer
- Connecting an Audio Device
- Connecting an Audio-Video Device
- Connecting an i.LINK Audio-Video Device
- Connecting an External Display
- Connecting with another VAIO computer
- Connecting External Speakers
- Connecting an External Microphone
- Expanding Your Computer Capabilities

Connecting a USB Device

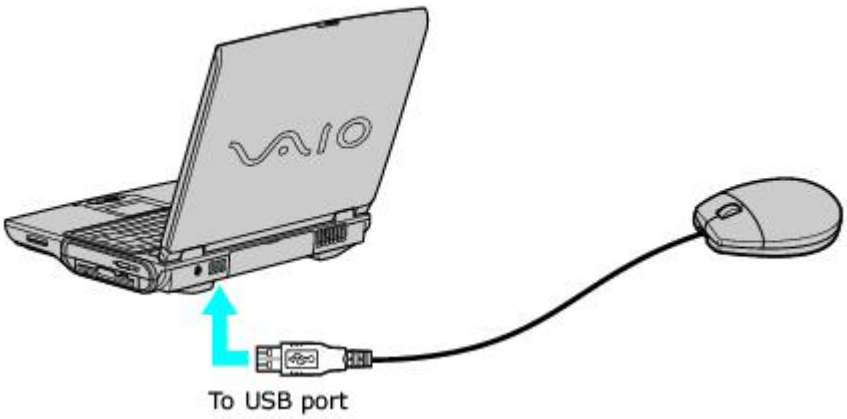
You can connect a universal serial bus (USB) device, such as a external mouse, keyboard, speaker, and microphone to your computer. However, make sure the USB device you want to connect is compatible with the Windows® operating system installed on your computer.

To connect a USB device

1. Locate a USB port on the rear panel of your computer.
2. Plug one end of the USB cable (not supplied) into one of these ports, and plug the opposite end of the cable into the USB device, if it is not already connected.

You can use a Sony USB mouse (not supplied) with this computer. The USB mouse software driver is preinstalled, however, the first time you connect a mouse, on-screen installation instructions may appear. Press Enter to complete the on-screen instructions.

Connecting a USB Mouse



See the manual that came with your USB device for more information on its installation and use.

Connecting a USB Printer

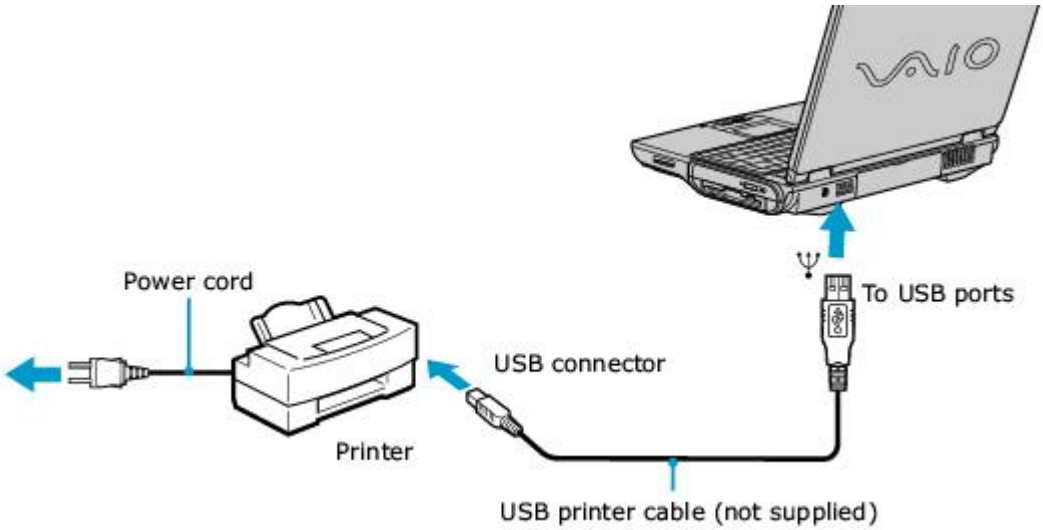
You can connect a universal serial bus (USB) printer to your computer. However, make sure the USB device you want to connect is compatible with the Windows® operating system installed on your computer.

To connect a USB printer

1. Locate a USB port on the rear panel of the computer.
2. Plug one end of the USB printer cable (not supplied) into one of these ports, and plug the opposite end of the cable into the USB port on your printer.

To use a printer, you may need to install the driver software that came with your printer.

Connecting a USB Printer



See the manual that came with your printer for more information on its installation and use.

Connecting a Parallel Port Printer

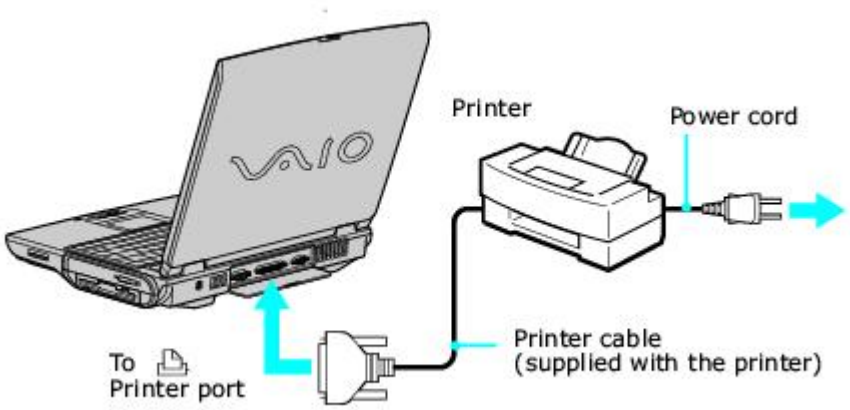
You can connect a parallel port printer to your computer. However, make sure the parallel port printer you want to connect is compatible with the Windows® operating system installed on your computer.

To connect to a parallel port printer

1. Locate the Printer port on the rear panel of the computer.
2. Plug one end of the printer cable (not supplied) into this port, and plug the opposite end of the cable into the parallel port on your printer.

To use a printer, you may need to install the driver software that came with your printer.

Connecting a Parallel Port Printer



See the manual that came with your printer for more information on its installation and use.

If your printer stops functioning after resuming from a power saving mode, see Troubleshooting the Printer for more information.

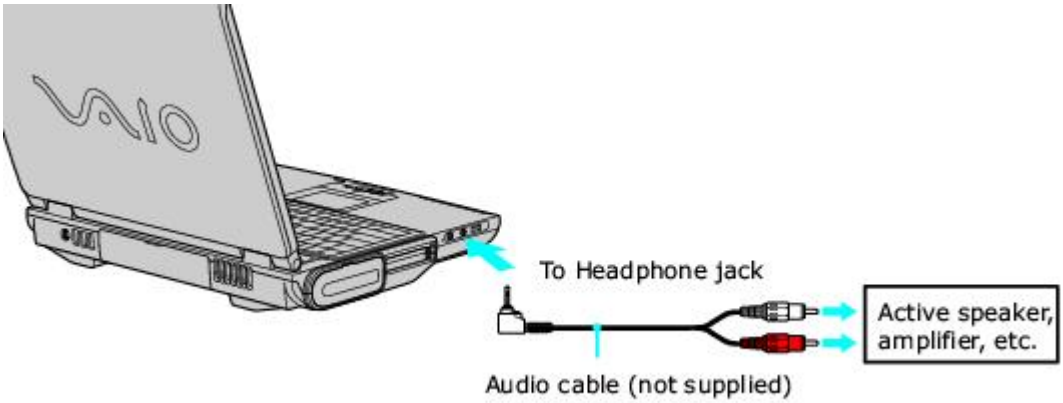
Connecting an Audio Device

You can connect an audio device to your computer using mini-plug cables shorter than 2 meters with no resistance.

To connect an audio device

1. Plug one end of an audio cable (not supplied) into the Headphone jack on the computer.
2. Plug the opposite end of the audio cable into an audio output device, such as a CD player, active speaker, or amplifier.

Connecting an Audio Device



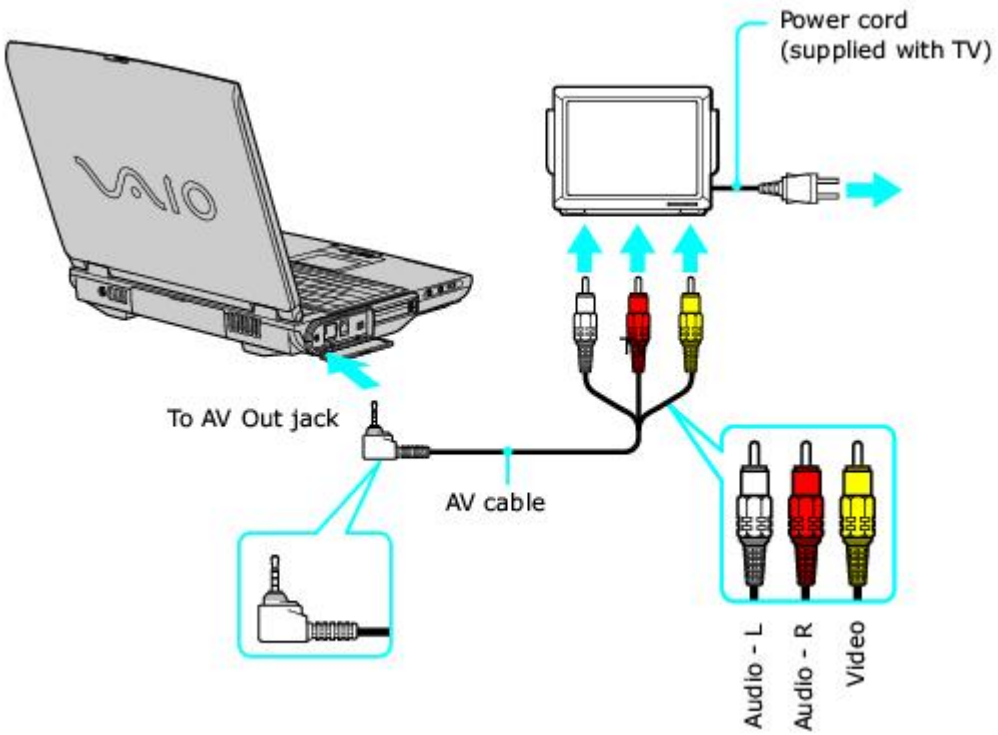
Connecting an Audio-Video Device

You can connect an audio-video (AV) device, such as a TV or a VCR, to your computer.

To connect an AV device

1. Locate the AV Out jack on the left panel of the computer.
2. Plug one end of the supplied AV cable into this jack, and plug the opposite end of the cable into the AV device.
3. Make sure you switch the TV input channel to external input and set up the TV configuration system. See To change the display for more information.

Connecting a TV to the Computer



See the manual that came with your peripheral device for more information on its installation and use.

To change the display

If you insert a DVD in your optical disc drive to watch on your TV, the Fn+F8 key combination might not activate the function to toggle between your LCD and TV. Follow these steps.

1. Connect the TV to the computer.
2. Restart the computer and wait until it finishes rebooting.
3. Press the Fn+F8 key combination to toggle between the LCD and TV display. The DVD will play on only one display at a time, so select either LCD or TV as the primary display. See Selecting the Display Mode for more information.
4. Re-insert your DVD to launch your DVD software.

A part of the image cannot be displayed on your TV display if the resolution of your computer is more than 1024 x 768 dots.

Connecting an i.LINK Audio-Video Device

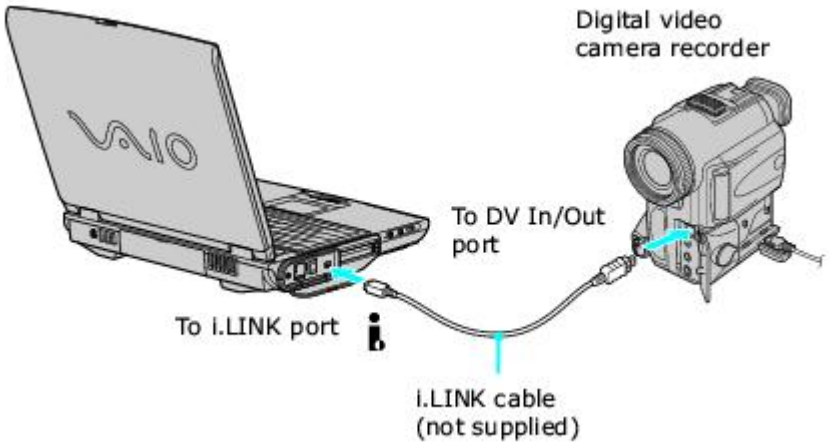
You can connect an i.LINK®[1] enabled digital video camera recorder to the i.LINK® S400 (IEEE 1394) port on your computer.

[1] i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connector. The i.LINK connection may vary, depending on the software application, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for more information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

To connect a digital video camera recorder

1. Plug one end of the i.LINK® cable (not supplied) into the i.LINK port on the left panel of the computer.
2. Plug the opposite end of the i.LINK cable into the DV IN/OUT port on the digital video camera recorder.

Connecting Digital Video Camera Recorder to i.LINK Port*



* In this illustration, a Sony digital video camera recorder is connected to the computer. Instructions for connecting a different type of digital video camera recorder may differ.

Notes on connecting an i.LINK device

- Only the Sony digital video camera port labeled DV IN/OUT or i.LINK are i.LINK-compatible.
- Do not connect more than one digital video camera at a time. The software supplied with your computer will not recognize multiple cameras.
- The i.LINK port does not supply power to external devices. If the external device requires power from the i.LINK port, you cannot use the device with the computer.
- The computer supports transfer rates up to 400 Mbps; however, the actual transfer rate is the lowest transfer rate of the external device.
- The i.LINK features available may vary depending on the software programs you use. See the documentation that accompanied your software for more information.
- See the manual that came with your digital video camera recorder for more information on its installation and use.

Connecting an External Display

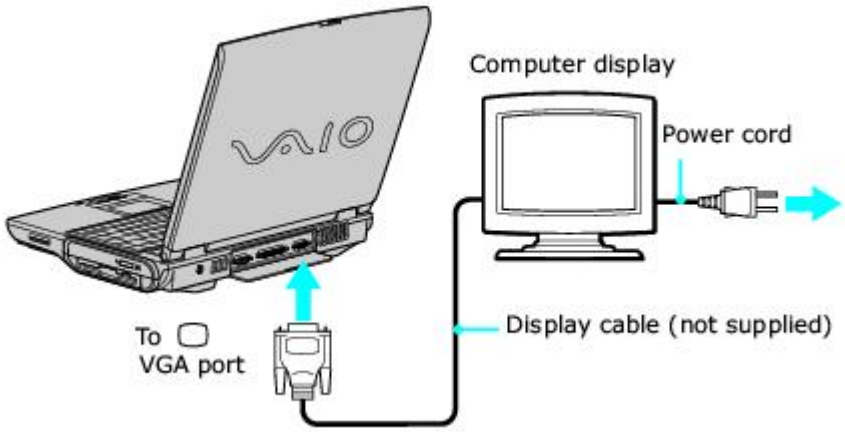
You can connect any of the following external displays to your computer.

- Computer display (monitor)
- Multimedia computer display
- Projector

To connect a computer display

1. Turn off the computer before you connect the computer display.
2. Locate the VGA (Monitor) port.
3. Plug the display cable (not supplied) into the VGA (Monitor) port.
4. Verify that the power cord is plugged into the computer display and an AC outlet.
5. Turn on all external devices before turning on the computer.

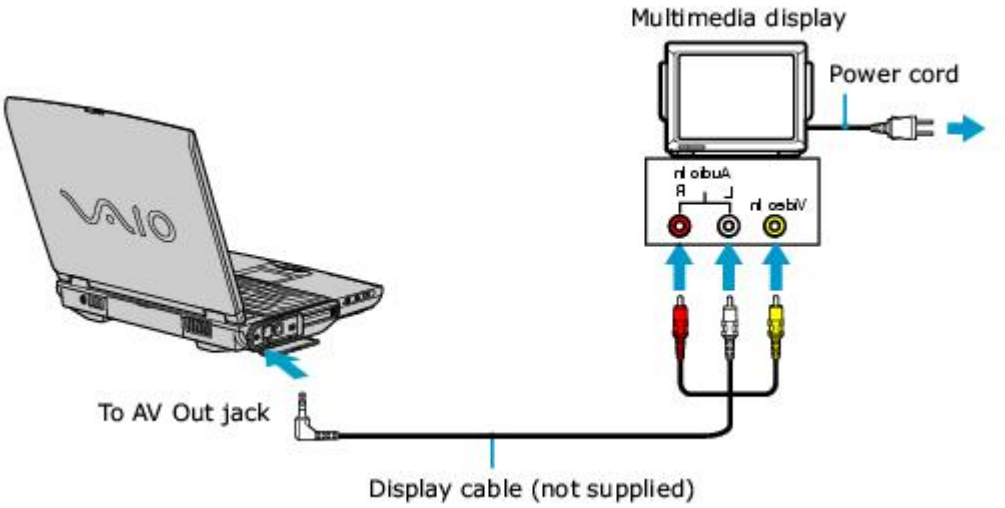
Connecting an External Computer Display



To connect a multimedia computer display

1. Turn off the computer before you connect the multimedia computer display.
2. Locate the AV Out jack on the left panel of the computer.
3. Plug one end of the display cable (not supplied) into the AV Out jack, and plug the opposite end of the display cable into the multimedia computer display.
4. Verify that the power cord is plugged into the multimedia computer display and an AC outlet.
5. Turn on all external devices before you turn on the computer.

Connecting a Multimedia Computer Display



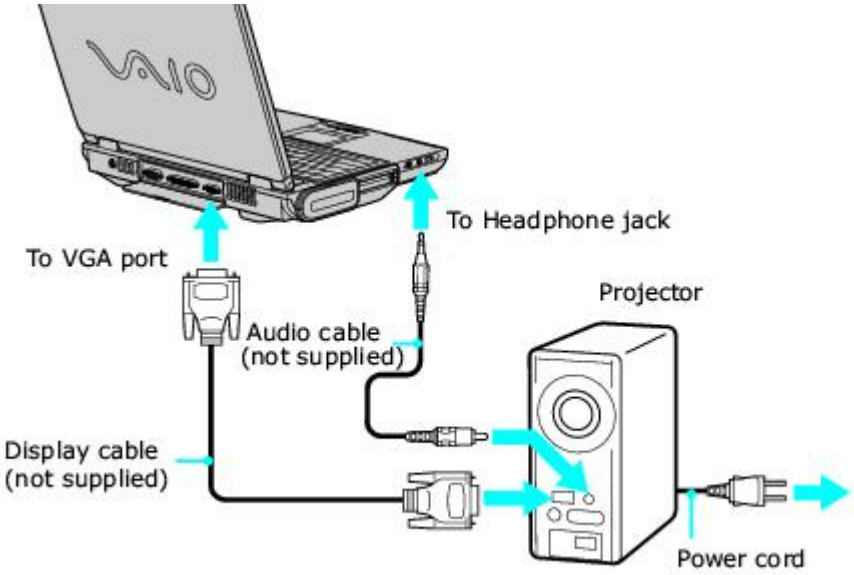
✍ Once you connect the external display to the computer, you can use Fn+F7 to toggle between the LCD, external display, and both LCD and external display. See Combinations and functions with the Fn key for more information.

See the manual that came with your multimedia computer display for more information on its installation and use.

To connect a projector

1. Turn off the computer before you connect the projector.
2. Locate the VGA (Monitor) port and the Headphone jack on the computer.
3. Plug one end of the display cable (not supplied) into the VGA port, and plug the opposite end into the appropriate port on the projector.
4. Plug one end of the audio cable (not supplied) into the Headphone jack, and plug the opposite end into the appropriate port on the projector.
5. Verify that the power cord is plugged into the projector and an AC outlet.
6. Turn on all external devices before you turn on the computer.

Connecting a Projector



See the manual that came with your projector for more information on its installation and use.

Changing the display when connecting an external computer display or projector

When you connect an external display to the VGA (Monitor) port, you can toggle the output between the Liquid Crystal Display (LCD), the external monitor, or both devices. Press the Fn+F7 key combination to select a display. See Selecting the Display Mode for more information.

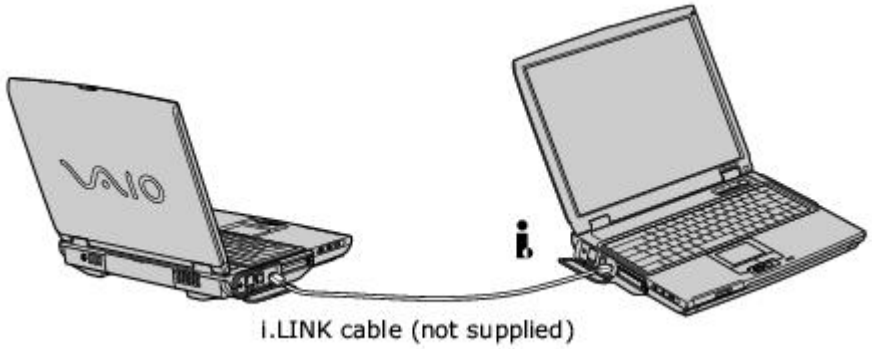
The Fn+F7 key combination may not work if you connect the external display to the computer when the computer is on. It is recommended that you connect the external display to the computer before you turn the computer on.

Connecting with another VAIO computer

The preinstalled Microsoft® Windows® XP operating system enables you to use a compatible i.LINK®[1] cable (not supplied) to connect your VAIO computer to another compatible computer. You can use one computer to edit, copy, or delete files on the other computer. You can also print from a printer attached to either computer.

You may need to use Smart Connect software to connect VAIO computers that do not have the latest Windows® operating system. Consult the Sony Web site for support options (http://www.sony.com/pcsupport).

Connecting with an i.LINK Cable



[1] i.LINK is a trademark of Sony used to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software programs, operating system, and compatible i.LINK devices. All products with an i.LINK connector may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as a CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

To connect two VAIO computers

1. Connect one end of the i.LINK cable to the i.LINK port on each computer.
2. Click Start on the Windows® taskbar, and click Control Panel.
3. Click Network and Internet Connections, and click "Set up or change your home or small office network." The Network Setup Wizard window appears.
4. Follow the on-screen Network Setup Wizard instructions.

When the Network Setup Wizard prompts you to name the computer, type in a unique name. You will use this unique name to differentiate the two computers once they are networked together.

The Network Setup Wizard will also prompt you to name your network. Make sure the Workgroup name is the same for the two networked computers.

5. When you finish the Network Setup Wizard on-screen instructions, click Start on the Windows® taskbar and click My Computer.
6. Click My Network Places in the Other Places menu. The My Network Places window appears.
7. Click "View workgroup computers" in the Network Tasks menu. The computers that are networked under the same Workgroup name are displayed in this window.

Connecting External Speakers

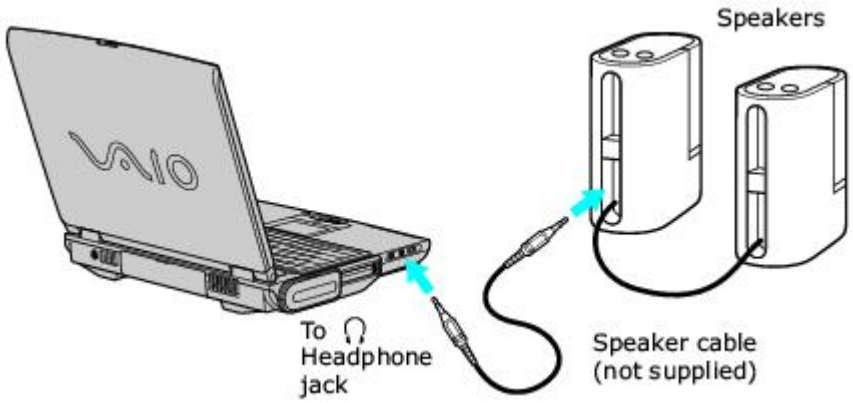
You can enhance the sound quality of your computer by connecting external speakers (not supplied).

⚠ **Do not place floppy disks on the speakers. The speakers' magnetic field may damage the data on the floppy disks.**

To connect external speakers

1. Make sure that your speakers are designed for computer use.
2. Turn down the volume of the speakers.
3. Locate the Headphone jack on the left panel of the computer.
4. Plug one end of the speaker cable (not supplied) into the Headphone jack.

Connecting External Speakers to the Headphone Jack



See the manual that came with your speakers for more information on its installation and use.

Notes on connecting external speakers

- Do not connect external speakers to the AV Out jack. Connecting speakers to this jack will not damage the speakers, but only one speaker will function.
- Do not use the external speakers and the compact woofer at the same time. Using both devices at the same time does not enhance sound quality.

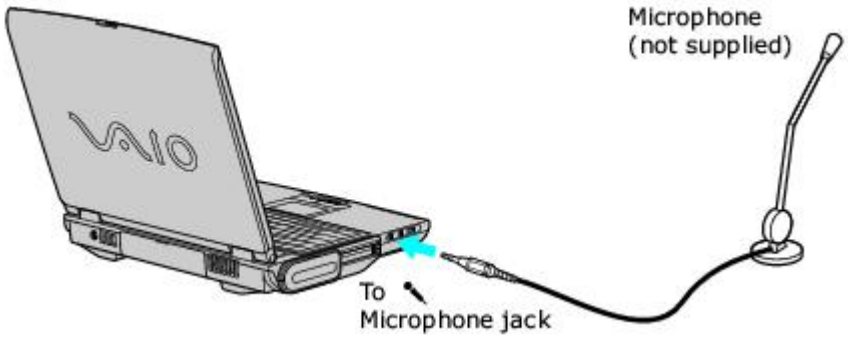
Connecting an External Microphone

You can enhance the quality of sound input by using an external microphone (not supplied).

To connect an external microphone

1. Make sure that your microphone is designed for computer use.
2. Locate the Microphone jack on the left panel of the computer. A protruding dot above the Microphone jack distinguishes this jack from the Headphone jack.
3. Plug one end of the microphone cable (not supplied) into the Microphone jack.

Connecting an External Microphone



See the manual that came with your microphone for more information on its installation and use.

To record from a microphone or audio device

You can record messages, memos, or other recordings in analog by connecting a microphone or other audio device to the Microphone jack of your computer and switching the jack's functionality. The Microphone jack is for MIC IN (monaural).

1. Double-click the Volume icon on the taskbar. The Volume Control window appears.
2. From the Options menu, click Properties. The Properties window appears.
3. In the Adjust volume for box, click the Recording option button to select it, and then click OK. The Recording Control window appears.

   ✍ You can only adjust the recording volume in the Recording Control window.
4. If it is not already turned on, click the Select check box at the bottom of the Microphone column. Close the Recording Control window.
5. Click Start on the taskbar, and select All Programs, Accessories, Entertainment, and then Sound Recorder. The Sound - Sound Recorder window appears.

✍ You are ready to begin recording. For help using Sound Recorder, click Help in the Sound Recorder window.

Adjusting the volume for playing CDs or DVDs

To adjust the volume for playing CDs and DVDs, use the Volume icon on the Windows® taskbar or the volume dial control. Adjusting the volume for playing CDs or DVDs does not adjust the volume for recording CDs or DVDs.

You can only adjust the recording volume in the Recording Control window. See To record from a microphone or audio device for instructions on how to open this window.

To adjust the volume using the Volume icon

1. Double-click the Volume icon on the taskbar. The Volume Control window appears.
2. In the Volume Control column, move the slider up to increase volume and down to decrease volume.

Sound device	Function
Volume Control	Adjusts the sound level from the speakers or headphones.
Wave	Adjusts the wavfile sound or the system sound of Windows.
SW Synth	Adjusts the internal or external synthesizer volume.
CD Audio	Adjusts the volume of the CD in the optical disc drive.
Microphone	Adjusts the internal or external microphone volume.
Telephony	Adjusts the modem or telephone line volume.
PC Beep	Adjusts the beep sound when inserting or removing the PC Card and other devices.
Line	Adjusts the sensitivity of volume input.

The Volume icon and Fn+F4 shortcuts will work only when the volume dial control is set to an audible level.

To adjust the volume using the volume dial control

- Rotate the volume dial control clockwise to increase the volume.
- Rotate the volume dial control counter clockwise to decrease the volume.

When you use the Volume icon to increase the volume, you also increase the volume dial control volume. Unlike the Volume icon, the volume dial control adjusts only the sound level from the speakers or headphones.

The volume dial control will work only when the Volume icon is set to an audible level.

Expanding Your Computer Capabilities

You can connect the following peripheral devices to your computer to expand its capabilities and enhance its versatility to meet your needs:

- A Personal Digital Assistant (PDA)
- A Wireless LAN Access Point
- A Wireless LAN PC Card

Personal Digital Assistant

A handheld PDA is the quintessential personal planner and entertainment center that fits in your pocket. With a PDA, you can easily perform the following functions:

- Enter your schedule details in the calendar and view them by the day, week, or month, and even set an alarm to remind you of important events.
- Keep your contact names, addresses, phone numbers, and other details in the address book and find them when you need them.
- Add tasks to the To Do List, prioritize them, and assign them due dates.
- Synchronize your data with the software on your computer to back up your data.
- Track expenses when you are out of the office and transfer the data to your computer.
- Exchange data with your computer.

Wireless LAN Access Point

The Wireless LAN Access Point is designed for building a wireless Local Area Network (LAN) environment. You can easily build a wireless LAN environment by plugging the access point into an AC power outlet and using a card that allows for wireless connections with the provided software. Because a wireless LAN configuration requires no wiring, you can operate multiple computers more freely than ever before.

You can also connect your access point to a telephone line, Integrated Services Digital Network (ISDN) router, cable modem, or Digital Subscriber Line (xDSL) modem to share access to the Internet among multiple computers.

Wireless LAN PC Card

You can purchase an external Wireless LAN PC Card separately, but your computer (depending on the model you purchased) may already come with a built-in mini PCI card that allows for wireless connections. The Wireless LAN PC Card is designed for a wireless LAN environment. You can use the Wireless LAN PC Card with or without the access point. With the access point, you can build a wireless LAN between computers that are equipped with the Wireless LAN PC Card and gain access to the Internet. Without the access point, you can achieve direct communication (Peer-to-Peer mode) between computers.

For more information on Sony Wireless LAN, go to http://www.sonystyle.com/vaio.

Customizing Your VAIO Computer

The following sections briefly describe how to change your computer's default settings.

- Displaying Battery Information
- Controlling Power Consumption
- Selecting the Display Mode

Displaying Battery Information

You can display information for each of the batteries in your computer. The following section briefly describes how to display your computer's general battery information.

To view battery information

1. Click Start on the Windows® taskbar, and click Control Panel.

2. Click Performance and Maintenance, and click Power Options. The Power Options Properties window appears.

3. Select the Power Meter tab. The total remaining battery charge is listed as a percentage. If your computer comes with more than one battery, you have the option of viewing information on both batteries or just the primary battery.

You may also use the power icon on the Windows® taskbar to quickly view battery information. See To view the power icon on the taskbar for instructions on how to set up this shortcut.

To view the power icon on the taskbar

1. Click Start on the Windows® taskbar, and click Control Panel.
2. Click Performance and Maintenance, and click Power Options. The Power Options Properties window appears.
3. Select the Advanced tab, and then select "Always show icon on the taskbar" in the Options box. The power icon appears on the taskbar. See Power icon descriptions for more information.

You can rollover the power icon to view the remaining battery charge, and you can double-click the power icon to open the Power Meter window, which also displays the remaining battery charge.

Power icon descriptions

Power icon	Power status
	Computer is running on AC power.
	Computer is running on AC power and charging the battery.
	Battery is charging.
	Battery is fully charged.
	Battery is discharging.
	No battery is inserted in the computer.

Controlling Power Consumption

You can use the preset power schemes or you can customize the power scheme settings to conserve power. By using the power schemes, you control the power supplied to different devices in your computer, such as the LCD screen and the hard disk drive. You also control when the computer activates a power saving mode (Standby or Hibernate).

To set your battery alarm

You can set your computer to notify you when your battery charge reaches a certain level.

1. Click Start on the Windows® taskbar, and click Control Panel.
2. Click Performance and Maintenance, and click Power Options. The Power Options Properties window appears.
3. Select the Alarms tab, and then select the type of alarm you want the computer to activate: a low battery alarm or a critical battery alarm.
4. Drag the slider to the battery level at which you want the computer to alarm you. The Low battery alarm is set to 10 percent, and the Critical battery alarm is set to 5 percent by default.

To further customize your alarm settings, click Alarm Action. Here, you can select the type of alarm you want the computer to activate and how you want the computer to respond to the alarm.

To use power saving modes

You can use the Standby and Hibernate power saving modes to override a profile setting or initiate an immediate action.

- **Standby —** Saves the state of the system and peripheral devices in memory (RAM). Power consumption reduces to a minimum, and the system remains on. To return the system to the active state, press any key on your computer.
- **Hibernate —** Provides for the lowest level of power consumption. The system writes the state of the system and peripheral devices to the hard disk and turns off the system power. To return the system to the original state, use the power button to turn on power. The system saves the data in the Save to Disk Partition on the hard drive.

See Using Power Saving Modes for instructions on how to use the Standby and Hibernate modes.

To select a power scheme

1. Click Start on the Windows® taskbar, and click Control Panel.

2. Click Performance and Maintenance, and click Power Options. The Power Options Properties window appears with the Power Schemes tab selected.

3. Select a power scheme from the drop-down power schemes list. Each power scheme is preset to utilize your power supply efficiently, according to your computing functions. Select the power scheme that best explains how you plan to use your computer.

4. Click Apply. The computer detects your changes.

To create a power scheme

1. Click Start on the Windows® taskbar, and click Control Panel.

2. Click Performance and Maintenance, and click Power Options. The Power Options Properties window appears with the Power Schemes tab selected.

✍ You can also right-click the power icon on the Windows® taskbar, and select Adjust Power Properties to open the Power Options Properties window.

3. Select your changes from the "Settings for....power scheme" box drop-down lists, and click Save As in the "Power schemes" box. The Save Scheme window appears.

4. Type a name for your customized power scheme, and click OK. The power scheme you created appears in the "Power schemes" box.

✍ If you want to delete a power scheme, select the power scheme and click Delete. When the Delete Scheme window appears, click Yes.

To customize your power properties

1. Click Start on the Windows® taskbar, and click Control Panel.
2. Click Performance and Maintenance, and click Power Options. The Power Options Properties window appears.

   If you want to access the power scheme information quickly from the Windows® taskbar, see To view the power icon on the taskbar for more information.

3. Select the Advanced tab, and select your changes from the "Power buttons" box drop-down lists. See Using Power Saving Modes for information on how Standby and Hibernate modes affect power consumption.
4. Click Apply. The computer detects your changes.

If you want the computer to activate Hibernate mode, you must select the Hibernate tab, and click "Enable hibernation" and then Apply.

Notes on batteries

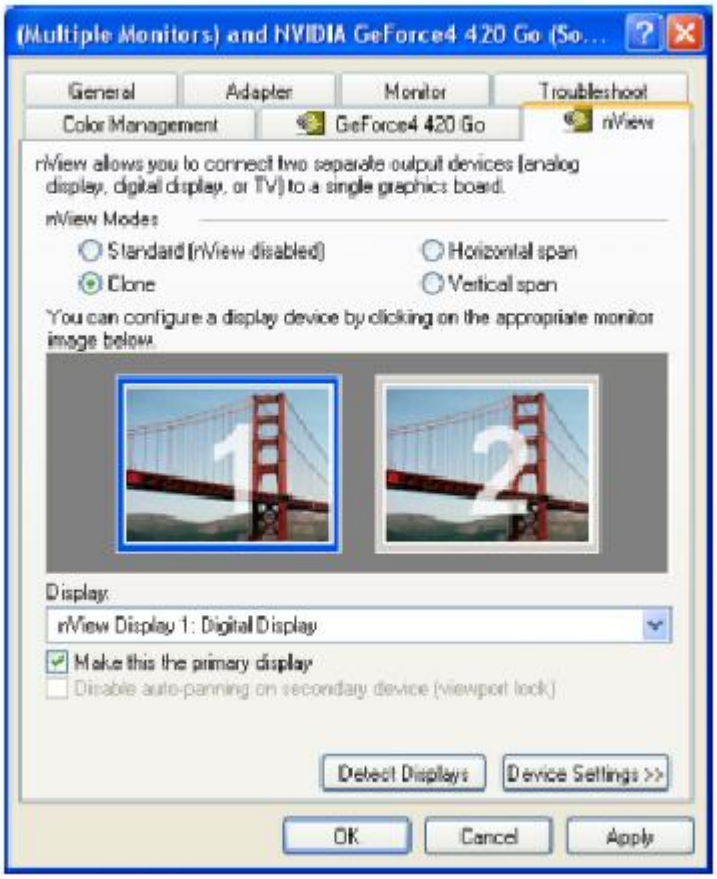
- Storing the battery in extreme cold or heat may affect battery life.
- Battery life gradually diminishes with the age and use of the battery.

Selecting the Display Mode

This computer uses the NVIDIA video controller. When you connect an external monitor to the computer, you may select which display you want to view the image. You have the option of switching the display mode to your computer's LCD display, the external monitor, or to both the LCD display and the external monitor.

1. Click Start on the Windows® taskbar, and then click Control Panel and Appearance and Themes.
2. Click Display to access the Display Properties window.
3. Click the Settings tab, and then click the Advanced button.
4. Select the nView tab. The "(Multiple Monitors) and NVIDIA GeForce4 420 Go" window appears.

(Multiple Monitors) and NVIDIA GeForce4 420 Go window



5. Select the radio button of one of the four options available in the nView Modes box.

Option	Description
Standard	Enables you to view the image on your LCD display.
Clone	Enables you to view the image on both the LCD display and the external monitor.
Horizontal span	Extends the image horizontally across the LCD display and the external monitor.
Vertical span	Extends the image vertically across the LCD display and the external monitor.

✍ You may not be able to display the image on the LCD screen and an external display or projector at the same time, depending on the type of computer display or projector you use.

Depending on the external display, you may need to connect the display to the computer before you turn the computer on.

Changing the window design of Sony software

To change the window design

1. Click Start on the Windows® taskbar, and click Control Panel.
2. In the left window pane of Control panel, click "Switch to Classic View."
3. Double-click UI Design Selector.
4. Click or and select the desired design.
5. Click Apply. The "UI Design Selector" window design changes. The window design for your Sony software will match the "UI Design Selector" window.
6. To try another selection, click or and then click OK to close the UI Design Selector.

This feature is available with UI Design Selector-compatible software only.

Adjusting the screen resolution

1. Click Start on the Windows® taskbar, and then click Control Panel and Appearance and Themes.
2. Click Display to access the Display Properties window, then select the Settings tab.
3. In the Screen resolution box, drag the slider to the change the resolution. You screen resolution is set to 1024 x 768 by default.

Adding Memory

In the future you may want to install memory modules to expand the functionality of your computer. See the VAIO® Computer Specifications for information on the amount of preinstalled memory and the type of memory modules you can use. Expansion memory modules are available as options. This section provides you with information on removing and replacing a memory module.

- Precautions and Procedures
- Typical Expansion Memory Configuration
- Removing a Memory Module
- Installing a Memory Module
- Confirming Added Memory Capacity

Precautions and Procedures

The procedures described below assume that you are familiar with the general terminology associated with personal computers and with common safety practices required for using and modifying electronic equipment. Personal injury or equipment damage may result from failure to take these precautions.

Make sure you observe the proper safety precautions when you install memory modules in your computer. See the bulleted list below. Be careful when adding memory. Mistakes made when installing or removing a memory module may cause a malfunction.

- Disconnect your system from its power source and from any telecommunications links, networks, or modems before you open the system or follow any of the procedures described below. Personal injury or equipment damage may result from failure to take these precautions.

- Electrostatic discharge (ESD) can damage memory modules and other components. Perform the procedures described below only at an ESD workstation. If such a station is not available, do not work in a carpeted area, and do not handle materials that produce or hold static electricity (cellophane wrappers, for example). Ground yourself by maintaining contact with an unpainted metal portion of the chassis while performing the procedure.

- Do not open the memory module package until you are ready to install the module. The package protects the module from ESD.

- Use the special bag for preventing ESD or use aluminum foil when you store the memory module.

Typical Expansion Memory Configuration

Models with 256 MB Memory

Total System Memory	Slot 1 (MB)	Slot 2 (MB)
256 MB	256	0
384 MB	256	128
512 MB	256	256

Typical Expansion Memory Configuration

Models with 256 MB Memory

Total System Memory	Slot 1 (MB)	Slot 2 (MB)
256 MB	256	0
384 MB	256	128
512 MB	256	256

Models with 512 MB Memory

Total System Memory	Slot 1 (MB)	Slot 2 (MB)
512 MB	512	
640 MB	512	128
768 MB	512	256
1 GB	512	512

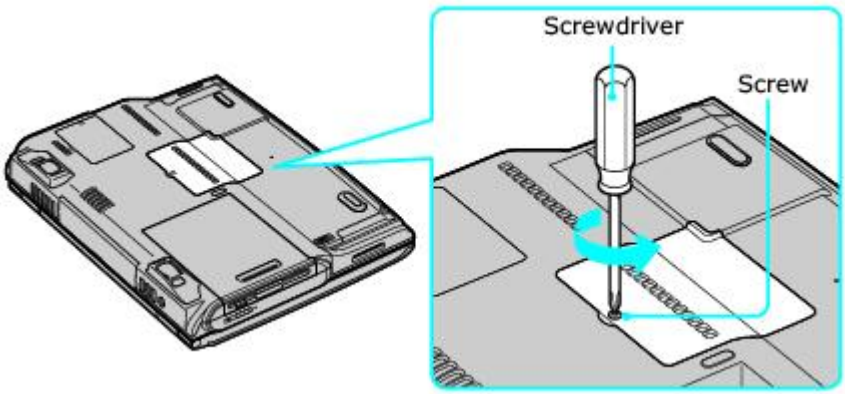
Removing a Memory Module

Your computer may come with two memory modules already installed in the memory bay. To upgrade your memory, you may need to remove a module before you can install an upgraded memory module(s).

To install an upgraded memory module into an empty slot, see Installing a Memory Module for instructions.

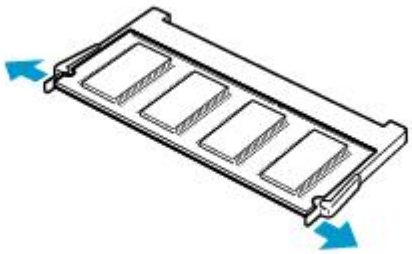
1. Turn off the computer and disconnect all peripheral devices, such as your printer.
2. Unplug the computer, and remove the battery.
3. Wait at least one hour for the computer to cool down.
4. Use an appropriate screwdriver to loosen and remove the screw that secures the cover of the memory bay on the bottom of the computer.

Removing the Memory Module Cover



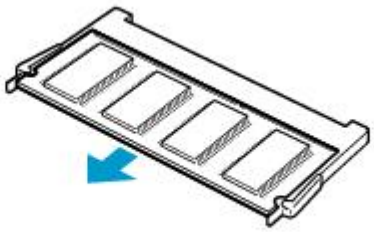
5. Touch a metal object, such as the connector panel on the back of your computer, to discharge any static electricity.
6. Pull the metal tabs that hold the memory module in place away from the module. The memory module pops up and is released from the bay.

Pulling Memory Module Tabs



7. Pull the memory module gently from the memory bay.

Pulling Memory Module from Memory Bay



8. Replace the memory module cover and the screw. Make sure the screw is tight enough to secure the cover.

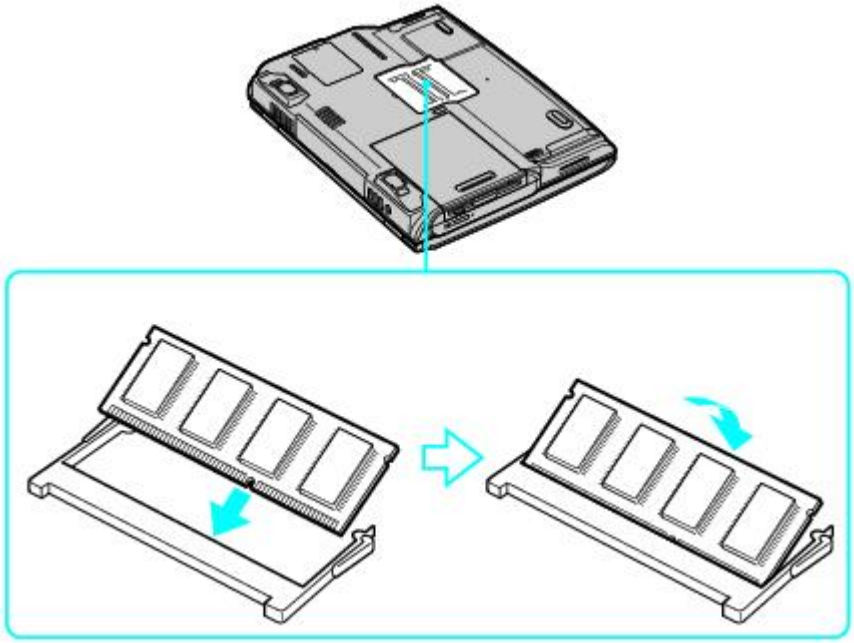
Installing a Memory Module

Your computer may come with one memory module installed. To upgrade your computer's overall memory capacity, you can install a second memory module into the empty slot.

If two memory modules are already installed in the memory bay and you want to install an upgrade memory module(s), see Removing a Memory Module for instructions.

1. Follow steps 1 to 5 of Removing a Memory Module.
2. Remove the new memory module from its package.
3. Align the new memory module with the grooves in the memory bay.
4. Slide the memory module into the vacant slot, and push it down until it clicks into place.

Installing a Memory Module



5. Replace the memory module cover and the screw. Make sure the screw is tight enough to secure the cover.

Confirming Added Memory Capacity

To check the amount of memory on your computer

1. Restart the computer.
2. Click Start on the Windows® taskbar, and click Control Panel.
3. Click Performance and Maintenance, and click System. The System Properties window appears.
4. On the General tab, you can view the amount of system memory. If the additional memory is not shown, remove and reinstall the memory module.

The amount of memory displayed is not always correct. The video adapter may use some system memory, and that amount of memory does not appear as part of the total memory shown.

Using the Recovery CDs

This section provides you with details on your Sony Application Recovery and System Recovery CDs.

- Application and System Recovery CDs
- Using Your Recovery CDs

Application and System Recovery CDs

Your computer comes with the following Application Recovery and System Recovery CDs. You will need an optical drive to use these recovery CDs. If your computer does not come with an optical drive, use an external optical disc drive.

Application Recovery CD(s)

Sony Electronics Inc.

This CD enables you to reinstall individual software programs and device drivers if they become corrupted or are erased.

System Recovery CD(s)

Sony Electronics Inc.

This CD enables you to restore the operating system and software that shipped with your computer if they become corrupted or are erased. This CD restores your computer to its original factory settings, so user data and software programs installed since you started using your computer will be lost.

Using Your Recovery CDs

The following sections describe how to use the Application Recovery and System Recovery utilities.

Using the Application Recovery CD(s)

The Application Recovery CD(s) utility enables you to reinstall individual software programs, device drivers, and repair software programs if they become corrupted or are erased. Reinstalling an individual program or device driver may correct a problem you are experiencing with your computer, peripheral hardware, or software. You may not need to reinstall the entire contents of your hard drive. To reinstall all the software titles that shipped with your computer, use the System Recovery CD(s). See Using the System Recovery CD(s) for more information.

You must be using a Windows® operating system to run the Application Recovery CD utility.

To reinstall programs with the Application Recovery CD(s)

1. Turn on your computer. If your computer is already on, close all open programs.
2. When the Windows desktop appears, insert Sony Application Recovery CD No. 1 into your computer's optical drive. The Application Recovery utility loads automatically.
3. Click OK in the VAIO welcome window. The Sony Application Recovery Program window appears.
4. Double-click the Software folder icon.
5. Select the icon for the application you want to restore, and then follow the on-screen instructions to complete the recovery process.

Your system may include one or more Application Recovery CDs. If you have more than one Application Recovery CD, insert the first CD to run the Application Recovery program. You may be prompted to insert the next CD, depending on the application you wish to restore.

To reinstall device drivers with the Application Recovery CD(s)

1. Click Start on the Windows® taskbar, and right-click My Computer.
2. Click Properties. The System Properties dialog box appears.
3. Click the Hardware tab, and click Device Manager.
4. Right-click the unknown device or the device that requires the driver installation, and click Update Driver from the shortcut menu. (The unknown device(s) is identified by a yellow question mark or exclamation point.)
5. In the Hardware Update Wizard, click to select "Install from a list or specific location (Advanced)."
6. Click Next.
7. Click to cancel the "Search removable media (floppy, CD-ROM...)" option.
8. Click to select "Include this location in the search."
9. Insert Application Recovery CD No. 1 into the optical drive.
10. Click Browse. The Browse For Folder dialog box appears.
11. Click to open the ARCD folder, and then open the drivers folder.
12. Click the folder name of the device in which you want to reinstall, and click OK. The Hardware Update Wizard appears.
13. Click Next.
14. Select the driver location that you selected in Step 12, and click Next. The Microsoft® Windows® operating system automatically reinstalls the device driver(s) from the Application Recovery CD.
15. Click Finish, and remove the Application Recovery CD from the optical drive.
16. Turn off your computer from the Start menu on the taskbar. For more information, see the "Turning Off Your Computer" section of your supplied VAIO® Computer Quick Start guide.
17. Wait 30 seconds, and turn on your computer.

If you have any questions about using the Application Recovery CD(s), visit http://www.sony.com/pcsupport, or contact Sony Customer Support at 1-888-4-SONY-PC.

Using the System Recovery CD(s)

The System Recovery CD(s) enables you to format your hard disk drive and restores all original software programs. Your computer is returned to the original factory settings.

The System Recovery process removes all software that you may have installed since you started using your computer. Reinstall any software programs that were not included with the computer when you purchased it.

You can use the System Recovery CD(s) to reinstall the operating system and software titles that shipped with your computer if they become corrupted or are erased. You may not need to reinstall the entire contents of your hard drive. If you experience a problem with your computer, reinstalling an individual device driver or software title may correct the problem. Use the Application Recovery CD(s) to reinstall individual programs and to reinstall device drivers. See Using the Application Recovery CD(s) for more information.

The System Recovery CD(s) contains a backup copy of all the software originally installed on your hard disk drive. It can be used only to recover the hard disk of the computer you purchased.

System Recovery options

- **Default System Drive Recovery —** All data on Drive C is deleted. The factory default settings and software programs are restored on this drive only.
- **Change Partition Size —** All partitions, custom installations, and changes are removed from the hard disk drive. You can set the partition sizes for both the Drive C and Drive D. The original, preinstalled operating system and software programs are restored.
- **Recovery to Original Factory Defaults —** All data and partitions are removed from the hard disk drive. All original factory settings, operating system, and preinstalled software are restored.

The System Recovery utility does not back up your system's data. If you wish to retain your system data, perform a backup to an external media.

To use the System Recovery CD(s)

Your system may take a few minutes to load necessary files. A blue screen may appear during the downloading process.

1. Insert the Sony System Recovery CD in the optical drive. The first CD must be in the drive before you restart your computer.
2. Turn off your computer from the Start menu on the taskbar. For more information, see the "Turning Off Your Computer" section of your supplied VAIO® Computer Quick Start guide.
3. Wait 30 seconds, and turn on your computer. The System Recovery utility restarts from the optical drive.
4. When the VAIO System Recovery Utility wizard appears, click Next.
5. Follow the on-screen instructions to complete the recovery process.

If your computer does not start from the Recovery CD

1. Press the power button and hold it for more than four seconds to turn off the computer.
2. Turn on the computer. When the Sony logo is displayed, press the F2 key. The BIOS setup menu screen appears.
3. Press the Right Arrow → to select the Exit menu.
4. Press the Down Arrow ↓ to select "Get Default Values," and press Enter. The Setup Confirmation window appears.
5. Press Enter again to select Yes.
6. Make sure Exit (Save Changes) is selected, and then press Enter. The Setup Confirmation window appears again.
7. Make sure "Yes" is selected, and press Enter. The computer restarts from the Recovery CD.

✍ Your system may include one or more System Recovery CDs. If you have more than one System Recovery CDs, insert the first CD to run the System Recovery program. You are prompted to insert the second CD once the information from the first CD has been installed.

The recovery process takes from 30 to 60 minutes to complete.

After recovering your system using the System Recovery CD(s), you may be prompted to insert your Application Recovery CD(s) after restarting the Windows operating system. Insert the Application Recovery CD to automatically complete recovery of your system.

About the Software on Your Computer

Your VAIO® computer is ready to help you work, play, learn, and communicate as soon as you turn it on. This section includes information on the variety of software applications installed on your computer:

- Software Overview
- Software Support Information

Software Overview

Your computer may not be supplied with all of the software listed below, depending on the configuration you purchased. Preinstalled software may not be identical to retail versions or include supporting documentation.

Adobe® Acrobat® Reader®
Adobe Systems Inc.

Acrobat Reader software allows you to view, navigate, and print electronic documents in Adobe's Portable Document Format (PDF), an open file format that is intended to preserve the fidelity of documents created on all major computer platforms.

Adobe® Photoshop® Elements Trial Version
Adobe Systems Inc.

Using state-of-the-art image editing tools, you can unleash your artistic ability and create digital images for print, e-mail, and posting to the Web. The versatile image capturing options enable you to start working with digital and traditional photos immediately. Explore extensive creative possibilities for your personal images with Adobe Photoshop Elements software. This trial version allows you to evaluate the software for 30 days, after which you can purchase it for a special price.

America Online®
America Online, Inc.

America Online is a popular Internet online service. Stay in touch with family and friends with easy-to-use e-mail. Manage your personal finances, get the latest news and sports scores, and chat with thousands of others who share your interests.

AT&T WorldNet® Service
AT&T Corp.

AT&T WorldNet Service offers fast, reliable Internet access. Customer benefits include Web-based e-mail, video e-mail, multiple e-mail accounts, free Web pages, online and live agent technical support, instant messaging, and parental controls.

DigitalPrint
Sony Electronics Inc.

This image management software makes it fun and easy to edit, import, and organize your digital pictures in a photo album for rich digital printing to any standard color laser or ink-jet printer. DigitalPrint can also be used to make custom CD labels for your audio CDs.

DVgate
Sony Electronics Inc.

Connect a digital video camera recorder to the i.LINK® port and capture your own video clips and still images. You can edit clips from your video, add new clips, and combine clips into new movie segments. You can also save your images in a variety of popular file formats.

EarthLink Network Total Access®
EarthLink, Inc.

An Internet Service Provider that supplies access, information, and assistance to its customers, introducing them to the Internet. Member benefits include e-mail, newsgroups, a Personal Start Page, free storage space for your personal Web site, a member magazine, and 24-hour technical support.

EverQuest® (On selected models)
Sony Online Entertainment Inc.

This introductory edition of EverQuest, a living, constantly evolving fantasy world, takes users to new heights of online role-playing gaming. Enter an enormous virtual environment—an entire world with its own diverse species, economic systems, alliances, and politics. Make yourself a noble human knight, a vicious dark elf thief, a greedy dwarven merchant, or whatever your heart desires as you meet new friends from around the world and face epic challenges.

MovieShaker
Sony Electronics Inc.

Sony's original MovieShaker software creates personal movies that have transitions, background music, and text. Just import your video clips and "shake" with a click of the mouse. Your personal movies are easy to create and fun to share with family and friends.

PC-Cillin® 2000
Trend Micro, Inc.

PC-Cillin software provides portable, easy-to-use, real-time antivirus security at your computer's entry point (beaming, synchronization, Internet access) to defend against potential threats hidden inside files, e-mail, or on the Web.

PicoPlayer
Sony Electronics Inc.

PicoPlayer software is a video player utility that enables you to use Giga Pocket Personal Video Recorder functions on a computer that does not have Giga Pocket Personal Video Recorder installed. You can play Video Capsules created by Giga Pocket Personal Video Recorder, and, if a Giga Pocket Server is available on your home network, watch TV streamed from the Giga Pocket Server and remotely control the Giga Pocket Server's TV programming functions.

Quicken® 2002 New User Edition[1]
Intuit Inc.

Quicken software is a fast, easy way to organize your finances. Quicken software works just like your checkbook, so it's easy to learn and use. You can even pay your bills online. Quicken software manages all of your finances, bank accounts, credit cards, investments, and loans. (Users of earlier versions of Quicken must upgrade for a fee.)

QuickTime®
Apple Computer, Inc.

The versatile QuickTime software is used to play hundreds of different kinds of files, including video, audio, and virtual reality (VR) movies. You can play QuickTime files (referred to as "QuickTime movies") using QuickTime Player or any other application, such as a Web browser or word processor, that supports QuickTime software.

RealPlayer®
RealNetworks, Inc.

RealPlayer software is a high-quality streaming media player that supports many digital media formats. The user-friendly interface has enhanced navigation capabilities, allowing you to access and enjoy audio and video programming over the Internet. RealPlayer software is your gateway to a superb Internet multimedia experience.

Smart Capture
Sony Electronics Inc.

Smart Capture is a fun new way to send multimedia messages via e-mail. Smart Capture manages the i.LINK® connection between your computer and a Sony Digital Handycam® Camcorder that supports the i.LINK interface. It allows you to capture compressed video or still images and save them to your hard disk drive or share via e-mail. A smart solution for computer, digital audio/video and network convergence.

SonicStage
Sony Electronics Inc.

This new jukebox application adds a host of new features to its predecessor, OpenMG Jukebox. Continuing to take advantage of Sony's copyright-protected ATRAC3 format for high-quality digital audio storage, SonicStage software sports a new music visualizer, a sleek new player skin design, audio CD burning capability, and a parametric equalizer for fine-tuning audio playback.

Sony ScreenBlast ACID (On selected models)
Sony Pictures Digital Entertainment

With the powerful Sony ScreenBlast ACID software you can create royalty-free music by utilizing its loop-based production tool, including unlimited tracks and enhanced effects.

Sony ScreenBlast Sound Forge® (On selected models)
Sony Pictures Digital Entertainment

Sony ScreenBlast Sound Forge allows you to record, edit, and process mono or stereo audio files for your multimedia or Internet projects. Whether you want to use a number of professional effects, convert video into streaming media, or synchronize audio to video — this software has everything you need to create rich, immersive multimedia and Internet content.

Sony on Yahoo!
Yahoo! Inc.

Personalize your own web portal with Sony on Yahoo! Get a free webmail account, customized news and local weather reports, comics, instant messaging, and more.

VAIO Support Agent
Sony Electronics Inc.

VAIO Support Agent provides immediate, interactive, online support with information about your preinstalled software and answers to frequently asked questions.

WinDVD®
InterVideo, Inc.

WinDVD software is a simple-to-use DVD player including all the features you would expect to find in a standard consumer DVD player, while also offering advanced display and navigation features such as zoom, pan, bookmark, and time search.

WordPerfect Office 2002 Standard
Corel Corp.

WordPerfect® Office 2002 Standard software includes all the applications you need to create professional-looking documents, newsletters, reports, presentations, and brochures while incorporating graphics, spreadsheets, charts, and tables with ease. This comprehensive suite includes the popular WordPerfect® 10 word processor, the Quattro® Pro 10 spreadsheet program, the Corel® Presentations 10 presentation program, and a wide range of additional productivity-enhancing features.

[1] Existing Quicken users may be required to pay an upgrade fee.

Software Support Information

Adobe® Acrobat® Reader®, Photoshop® Elements Trial Version (Adobe Systems Inc.)

Web site http://www.adobe.com

e-mail techdocs@adobe.com

telephone 206-675-6126 (fee-based support)

fax 206-628-5737

hours M-F, 6 A.M.-5 P.M. (Pacific time)

EverQuest® (Sony Online Entertainment Inc.)

Web site http://www.everquest.com

e-mail eqtech@soe.sony.com

telephone 858-831-9143

hours M-F, 8:30 A.M.-5:30 P.M. (Pacific time)

Microsoft® Windows® Operating System (Microsoft Corp.)

Web site http://www.sony.com/pcsupport

telephone 888-4-SONY-PC (888-476-6972)[1]

hours 7 days a week, 24 hours a day

[1] Support from 1-888-4-SONY-PC is free of charge for 90 days after the original date of purchase.

PC-Cillin® 2000 (Trend Micro, Inc.)

Web site http://www.antivirus.com/pc-cillin/support

telephone 510-859-0308; 900-820-8324[1]

hours M-F, 8 A.M.-5 P.M. (Pacific time)

[1] Support from 510-859-0308 is free of charge, but subject to delays. Support from 900-820-8324 is fee-based, but offers immediate response.

Quicken® 2002 New User Edition (Intuit Inc.)

Web site http://www.intuit.com/support

telephone 900-555-4932; 800-644-3193[1]

hours M-F, 5 A.M.-5 P.M. (Pacific time)

[1] Support from 900-555-4932 is fee-based. Support from 800-644-3193 is automated and free of charge.

QuickTime® (Apple Computer, Inc.)

Web site http://www.apple.com

telephone 800-275-2273

hours M-F, 6 A.M.-6 P.M. (Pacific time)

RealPlayer® (RealNetworks, Inc.)

Web site http://service.real.com/rjoptions.html

e-mail http://service.real.com/help/call.html (online email form)

Sony Applications (Sony Electronics Inc.)

Web site http://www.sony.com/pcsupport

telephone 888-4-SONY-PC (888-476-6972)[1]

hours 7 days a week, 24 hours a day

[1] Support from 1-888-4-SONY-PC is free of charge for 90 days after the original date of purchase.

Sony ScreenBlast ACID, Sony ScreenBlast Sound Forge® (Sony Pictures Digital Entertainment)

Web site http://www.sonicfoundry.com/support

e-mail support@sonicfoundry.com

telephone 900-407-6642 (fee-based support)

fax 608-256-7300

hours M-F, 9 A.M.-5 P.M. (central time)

WinDVD® (InterVideo, Inc.)

Web site http://www.intervideo.com

telephone 510-651-0888

WordPerfect® Office 2002 Standard (Corel Corp.)

Web site http://www.corel.com

phone 613-274-0500

hours M-F, 8:30 A.M.-7:30 P.M. (eastern time)

Sony Service Center

For the Sony Service Center nearest you, call 1-888-4-SONY-PC (1-888-476-6972) or find Sony Customer Service on the Web at http://www.sony.com/pcsupport.

Troubleshooting

This section describes how to solve common problems you may encounter when using your computer. Many problems have simple solutions, so try these suggestions before you contact Sony Computing Support (http://www.sony.com/pcsupport). Consult the following sections:

- Troubleshooting Your Computer
- Troubleshooting the LCD Screen
- Troubleshooting the Mouse and Touchpad
- Troubleshooting Drives, PC Cards, and Peripheral Devices
- Troubleshooting the Software
- Troubleshooting i.LINK Devices
- Troubleshooting the Modem
- Troubleshooting Audio
- Troubleshooting Memory Stick Media
- Troubleshooting the Printer

My computer does not start.

- Make sure the computer is plugged into a power source and is turned on.
- Make sure the power indicator indicates that the power is on.
- Make sure the battery is inserted properly and is charged.
- Make sure there is no floppy disk in the floppy disk drive.
- Confirm that the power cord and all cables are firmly connected.
- If you plugged the computer into a power strip or uninterruptible power supply (UPS), make sure the power strip or UPS is turned on and working.
- If you are using an external display, make sure it is plugged into a power source and turned on. Make sure the brightness and contrast controls are adjusted correctly. See the manual that came with your display for details.
- Condensation may cause the computer to malfunction. If this occurs, do not use the computer for at least one hour.
- Remove the battery from the computer, unplug the power cord and plug it in again, then turn on the power.

My computer does not start.

- Make sure the computer is plugged into a power source and is turned on.
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- Condensation may cause the computer to malfunction. If this occurs, do not use the computer for at least one hour.
- Remove the battery from the computer, unplug the power cord and plug it in again, then turn on the power.

My computer starts but a BIOS error appears.

When the battery is low on power, it may not start your system properly. The message "Press <F1> to resume, <F2> to setup" appears at the bottom of the screen. Follow these steps:

1. Press the F2 key. The BIOS Setup menu appears.
2. Set the date (month/day/year). Press Enter.
3. Press the Down Arrow key to select System Time, then set the time (hour: minute: second). Press Enter.
4. Press the Right Arrow key to select the Exit menu.
5. Press the Down Arrow key to select Get Default Values. The message "Load default configuration now?" appears.
6. Select Yes, and press Enter.
7. Make sure Exit (Save Changes) is selected, and press Enter. The message "Save configuration changes and exit now?" appears.
8. Select Yes, and press Enter. The computer restarts.

If this occurs on a regular basis, contact Sony Computing Support (http://www.sony.com/pcsupport).

My computer starts, but the message "Operating system not found" appears, and Windows does not start.

Make sure there is no floppy disk in the floppy disk drive (non-bootable).

- If a non-bootable floppy disk is in the drive, follow these steps:
  1. Turn off the computer, and then remove the floppy disk.
  2. Restart the computer and confirm that Windows starts properly.
- If Windows still does not start, follow the steps below to initialize the BIOS:
  1. Remove any floppy disk from the floppy disk drive.
  2. Turn off the computer.
  3. Remove any peripheral devices connected to the computer.
  4. Turn the computer back on.
  5. Press the F2 key when the Sony logo appears. The BIOS setup menu appears.
  6. Press the Right Arrow → key to select the Exit menu.
  7. Press the Down Arrow ↓ key to select "Get Default Values" and then press Enter. The message "Load default configuration now?" appears.
  8. Select Yes, and press Enter.
  9. Make sure Exit (Save Changes) is selected, and then press Enter. The message "Save configuration changes and exit now?" appears.
  10. Select Yes, and press Enter. The computer restarts.

  If your computer continues to display the message "Operating system not found," and Windows does not start, use your supplied System Recovery CD to restore the operating system and software titles shipped with your computer. See Using the System Recovery CD(s) for more information.

  ⚠ **The System Recovery CD restores your computer to its original state, so user data and programs will be lost.**

My computer stops responding or does not turn off.

It is best to turn off your computer using the Turn Off Computer command on the Windows® Start menu. Using other methods, including those listed here, may result in loss of unsaved data.

- Turn off your computer, click Start on the Windows® taskbar then click Turn Off Computer and Turn Off.
- If your computer does not turn off, press the Ctrl+Alt+Delete keys simultaneously. The Windows Task Manager dialog box appears. Click the Shut Down menu, and then click Turn Off.
- If the previous step does not work, press and hold the power button for at least four seconds. This turns off the power.
- If your computer stops responding while playing a CD or DVD, stop the CD/DVD, and restart the computer by pressing the Ctrl+Alt+Delete keys at the same time. The Windows Task Manager dialog box appears, and you can restart the computer from the Shut Down menu.
- Unplug the computer from the AC adapter, and remove the battery from your computer.

Pressing the Ctrl+Alt+Delete keys to turn off the computer via Windows Task Manager or the Windows Security screen, or turning off the computer with the power switch may result in data loss in files that are currently open.

The power management does not respond.

- Your computer's operating system may become unstable if a lower power state, such as Hibernate, is initiated and changed before the computer completely enters the lower power state. Follow these instructions to restore the computer to its normal operating stability.

    1. Close all open programs.

    2. Restart the computer. Press the Ctrl+Alt+Delete keys simultaneously. When the Windows Task Manager dialog box appears, click the Shut Down menu, and then click Restart.

    3. If this procedure does not work, press and hold the power button for four seconds or longer to turn off the computer.

- If your computer does not enter Hibernate mode, you may need to enable Hibernate mode on your computer.

    1. Right-click on the desktop, and click Properties. The Display Properties dialog box appears.

    2. Click the Screen Saver tab, and click Power. The Power Options Properties dialog box appears.

    3. Click the Hibernate tab, and click the Enable hibernation check box to select it.

    4. Click Apply.

    5. Click the Advanced tab, and select Hibernate from the "When I press the power button on my computer" drop-down menu.

    6. Click Apply, and then OK. Now your computer is set to enter Hibernation mode whenever you press the power button while the system is on.

Why does the System Properties dialog box display a slower CPU speed than advertised?

This is normal. Because your computer's CPU uses a type of CPU speed controlling technology for power conservation purposes, System Properties may display the CPU's current speed instead of the maximum speed.

Troubleshooting the LCD Screen

My LCD screen is blank.

- Make sure the computer is plugged into a power source and is turned on.
- Make sure the power indicator on the computer is on.
- Make sure the battery is inserted properly and is charged.
- The computer may be in LCD (Video) Standby mode. Press any key to activate the screen.
- The display mode may be set to external display mode. Press and hold the Fn key while pressing the F7 key several times.

Troubleshooting the LCD Screen

My LCD screen is blank.

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- Make sure the power indicator on the computer is on.
- Make sure the battery is inserted properly and is charged.
- The computer may be in LCD (Video) Standby mode. Press any key to activate the screen.
- The display mode may be set to external display mode. Press and hold the Fn key while pressing the F7 key several times.

My LCD screen continues to show the previous screen.

Press the Windows and "D" keys twice to refresh the screen.

The image on my connected external display is not centered or sized properly.

Use the controls on your external display to adjust the image. See the manual that came with your display for more information.

I want to change the video resolution of my display.

1. Click Start on the taskbar, and then Control Panel.
2. Click Appearance and Themes, and then click the Display icon. The Display Properties dialog box appears.
3. Click the Settings tab.
4. Move the Screen resolution slider to change your video resolution, and click Apply and OK.

I want to change the display resolution for AV Out.

1. Make sure your computer was started with the AV Out jack plugged in.
2. Click Start on the taskbar, and then Control Panel.
3. Click Appearance and Themes, and then click the Display icon. The Display Properties dialog box appears.
4. Click the Settings tab.
5. Move the Screen resolution slider to change your video resolution.

I cannot switch the LCD display to TV and vice versa.

1. Ensure that the TV was connected, configured, and powered on correctly prior to starting the computer. See Connecting an Audio-Video Device for more information.

2. Remove the DVD video disc if it is inserted in the optical drive.

3. Press Fn+F8 to change the display.

Troubleshooting the Mouse and Touchpad

My mouse does not work.

- If you connected a mouse to your computer, make sure the mouse is plugged into the mouse connector. See Connecting a USB Device in the online VAIO® Computer User Guide for more information.
- If you are using an optional Sony USB mouse, make sure the mouse is plugged into the USB port.
- If you are still experiencing problems, use your supplied Application Recovery CD to reinstall the mouse drivers. See Using the Application Recovery CD(s) for more information.

Troubleshooting the Mouse and Touchpad

My mouse does not work.

- If you connected a mouse to your computer, make sure the mouse is plugged into the mouse connector. See Connecting a USB Device in the online VAIO® Computer User Guide for more information.
- If you are using an optional Sony USB mouse, make sure the mouse is plugged into the USB port.
- If you are still experiencing problems, use your supplied Application Recovery CD to reinstall the mouse drivers. See Using the Application Recovery CD(s) for more information.

My touchpad does not work properly.

- Make sure another mouse was not installed.
- Try restarting your computer. Follow these steps:
  1. Press the Windows key.
  2. Press the "U" key to select Turn Off Computer, and wait at least four seconds.
  3. Press the "R" key to restart your computer.
- If your touchpad is interpreting a single tap as a double-click, adjust the button assignments. Follow these steps:
  1. Press the Windows key to display the Start menu.
  2. Press the Up Arrow key to select Control Panel, and press Enter.
  3. Press the Tab key to select Printers and Other Hardware, and press Enter.
  4. Press the Tab key to select Mouse, and press Enter. The Mouse Properties dialog box appears with the Buttons tab open.
  5. Press the Tab key to select the Default button, and press Enter. The button preferences automatically update to the original settings.
- Press the Tab key to select OK, and press Enter.
- If you are still experiencing problems, you may need to use your Application Recovery CD to reinstall the mouse drivers. See Using the Application Recovery CD(s) for more information.

The pointer does not move while using the Touchpad or Mouse.

- Try restarting the computer. Follow these steps:

  1. Press the Windows key.
  2. Press the "U" key to select Turn Off Computer, and then wait at least four seconds.
  3. Press the "R" key to restart your computer.

- If you cannot restart your computer, press the Ctrl+Alt+Delete keys simultaneously. The Windows Task Manager dialog box appears, and you can restart the computer from the Shut Down menu.
- If you cannot restart your computer as previously described, press and hold the power button for more than four seconds to turn off the computer.
- If the pointer does not move while playing a disc, press the Ctrl+Alt+Delete keys simultaneously to stop playback and restart the computer.
- If you are still experiencing problems, make sure another mouse was not installed.
- You may need to use your supplied Application Recovery CD to reinstall the touchpad or mouse drivers. See Using the Application Recovery CD(s) for more information.

My floppy disk drive icon doesn't appear even though it is connected.

- Make sure the floppy disk drive is properly connected. Wait a few moments for the computer to recognize the drive.
- Close all open programs, and make sure there is no disk in the floppy disk drive. Restart your computer with the connected floppy disk drive.

My floppy disk drive icon doesn't appear even though it is connected.

- Make sure the floppy disk drive is properly connected. Wait a few moments for the computer to recognize the drive.
- Close all open programs, and make sure there is no disk in the floppy disk drive. Restart your computer with the connected floppy disk drive.

My floppy disk drive cannot write to a floppy disk.

- If the floppy disk is write-protected, disable the write-protect feature or use a floppy disk that is not write-protected.
- Make sure a formatted floppy disk is properly inserted into the floppy disk drive.

My optical drive is not playing my CD or DVD properly.

- Make sure the disc label is facing up.
- If the disc requires software, make sure the software is installed according to the manufacturer's instructions.
- A dirty or damaged disc may cause the computer to stop responding while it tries to read the disc. If necessary, restart the computer, remove the disc, and check the disc for dirt or damage.
- If you see video but cannot hear audio, do the following:
  - Make sure your optical drive does not have the mute setting enabled.
  - Check the volume setting in the audio mixer.
  - If you are using external speakers, check the volume settings, and then check the connections between your external speakers and the computer.
  - Click Start on the taskbar, and then Control Panel, Performance and Maintenance, and System. Select the Hardware tab, and click Device Manager. Make sure the correct drivers are properly installed.
- Do not use adhesive labels to identify the CD. The label may come off while the disc is in use in the optical drive and cause the drive to malfunction.
- If a region code warning appears when you try to use your optical drive, it may be that the DVD you are trying to play is incompatible with the optical drive. Verify the region code listed on the DVD package.
- Condensation may cause the computer to malfunction. If this occurs, do not use it for at least one hour.
- Make sure the digital CD audio is enabled for your optical drive. Follow these steps:
  - Click Start on the taskbar, and then Control Panel, Performance and Maintenance, and System. The System Properties dialog box appears.
  - Select the Hardware tab, and then click Device Manager. The Device Manager dialog box appears.
  - Double-click the listed DVD/CD-ROM drive. The Properties window opens.
  - Click the Properties tab, and then select the "Enable digital CD audio for this CD-ROM device" check box.

Why does it take longer for the optical drive to read some types of CDs?

The reading speed for a CD-RW is slower than the reading speed for a CD-ROM or CD-R because these discs are formatted differently.

My optical drive tray does not open.

- Make sure the computer is turned on.
- Press the Eject button on the optical drive.
- Click Start on the Windows® taskbar, and then click My Computer. Right- click DVD/CD-RW Drive and select Eject from the drop-down menu.
- If these options do not work, open the tray by inserting a thin, straight object (such as a paper clip) in the hole to the right of the Eject button.

I cannot use Digital Video (DV) devices. The message "DV equipment seems to be disconnected or turned off" appears.

- Make sure the DV device is turned on and the cables are properly connected.
- If you are using multiple i.LINK®[1] devices, the combination of the connected devices may cause unstable operation. Follow these steps:
  1. Turn off your computer and all connected devices.
  2. Disconnect the devices that are not in use.
  3. Ensure that all other devises are properly connected.
  4. Restart your computer.
- Disconnect the i.LINK® cable and connect it again.

[1] i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software programs, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

My PC Card does not work.

- Make sure the PC Card is installed properly.
- Make sure the PC Card is compatible with the Microsoft® Windows® operating system.
- Make sure any necessary drivers were installed properly. See Using the Application Recovery CD(s) for more information.

Troubleshooting the Software

My software program stops responding or crashes.

Contact the software publisher or designated provider for technical support. See Software Support Information for contact information.

Troubleshooting the Software

My software program stops responding or crashes.

Contact the software publisher or designated provider for technical support. See Software Support Information for contact information.

When I click a program icon, the message "You must insert the Application CD into your optical drive" appears, and the program does not start.

- Some titles require specific files that are located on the Application Recovery CD. Insert the disc, and try starting the program again.
- Make sure you place the CD in the tray with the label side facing up.
- Make sure the optical drive is connected to your computer. See Using the Optical Disc Drive for more information.

What software program do I use for CD-R/CD-RW software functions?

Using the preinstalled SonicStage software's Record function to create CDs on your VAIO® computer, if the specific model you purchased is preconfigured with all of the necessary components for CD-R and CD-RW capability.

Troubleshooting i.LINK Devices

I cannot establish a connection between two VAIO computers when using an i.LINK cable.

1. Disconnect the i.LINK®[1] cable from both computers and reconnect it.
2. Wait for the computers to respond. If neither computer responds after a few moments, restart both computers.

The computers may not recognize an i.LINK connection after returning from a power saving mode (Standby or Hibernate). If that happens, restart both computers to establish a connection.

[1] i.LINK is a trademark of Sony used only to designate that a product contains an IEEE 1394 connection. The i.LINK connection may vary, depending on the software programs, operating system, and compatible i.LINK devices. All products with an i.LINK connection may not communicate with each other. Refer to the documentation that came with your compatible i.LINK device for information on operating conditions and proper connection. Before connecting compatible i.LINK PC peripherals to your system, such as CD-RW or hard disk drive, confirm their operating system compatibility and required operating conditions.

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Troubleshooting the Modem

My modem does not work.

- Make sure the telephone cable is plugged into the cable jack. See Connecting a Telephone Cable for more information.
- Make sure the telephone cable is working by plugging the cable into an ordinary telephone and listening for a dial tone.
- Make sure the telephone number the program is dialing is correct.
- Make sure the program you are using is compatible with the computer's modem. (All preinstalled Sony programs are compatible.)
- If you are still experiencing problems, use the supplied Application Recovery CD(s) to reinstall the modem drivers. See Using the Application Recovery CD(s) for more information.

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- If you are still experiencing problems, use the supplied Application Recovery CD(s) to reinstall the modem drivers. See Using the Application Recovery CD(s) for more information.

My modem connection is slow.

Your computer is equipped with a V.90 compatible modem. Many factors may influence modem connection speed, including telephone line noise or compatibility with telephone equipment (such as fax machines or other modems). If you think your modem is not connecting properly to other PC-based modems, fax machines, or your Internet service provider (ISP), do the following:

- Ask your telephone company to verify your telephone cable is free of any line noise.
- If your problem is fax-related, make sure there are no problems with the fax machine you are calling and that it is compatible with fax modems.
- If you are having a problem connecting with your ISP, make sure the ISP is not experiencing technical problems.
- If you have a second telephone line available, try connecting the modem to that line.

Troubleshooting Audio

My speakers have no sound.

- If the built-in speakers are turned off, press Fn+Shift+F3 or use the center Jog Dial Control to turn on the speakers.
- The speaker volume may be too low. Press Fn+F4 to increase the volume. If you double-click the Volume icon on the Windows® taskbar, you can view your changes on the Volume Control window.

  The Volume icon and Fn+F4 shortcuts will work only when the volume dial control is set to an audible level.

- Check the volume controls in the Windows® taskbar.

  1. Right-click the Volume icon on the taskbar, and select Open Volume Control. The Volume Control dialog box appears.
  2. Make sure the Mute check boxes are not selected. If they are selected, click the check box to cancel the selection.
  3. Close the Volume Control dialog box.

- Make sure the CD audio enable is turned on

  1. Click Start on the Windows® taskbar, and then Control Panel.
  2. Click Performance and Maintenance, and then System. The System Properties dialog box appears.
  3. Select the Hardware tab, and then click Device Manager. The Device Manager dialog box appears, listing your computer hardware devices.
  4. Double-click DVD/CD-ROM drives.
  5. Double-click the listed drive name.
  6. Click the Properties tab.
  7. If the "Enable digital CD audio for this CD-ROM device," check box is not selected, click it to turn it on.

- If your computer is powered by batteries, make sure the batteries are properly inserted and are charged.
- If you are using an program that has its own volume control, verify the volume is turned up.
- If you connect external speakers:

  1. Make sure the speakers are properly connected and the volume is turned up loud enough to hear sound.
  2. If the speakers have a mute button, make sure the button is off.
  3. If the speakers are powered by batteries, make sure the batteries are inserted properly and are charged.

- If you have connected an audio cable to the Headphone jack, disconnect the cable.
- If you are still experiencing problems, use the Application Recovery CD(s) to reinstall the drivers. See Using the Application Recovery CD(s) for more information.

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  5. Double-click the listed drive name.
  6. Click the Properties tab.
  7. If the "Enable digital CD audio for this CD-ROM device," check box is not selected, click it to turn it on.

- If your computer is powered by batteries, make sure the batteries are properly inserted and are charged.
- If you are using an program that has its own volume control, verify the volume is turned up.
- If you connect external speakers:

  1. Make sure the speakers are properly connected and the volume is turned up loud enough to hear sound.
  2. If the speakers have a mute button, make sure the button is off.
  3. If the speakers are powered by batteries, make sure the batteries are inserted properly and are charged.

- If you have connected an audio cable to the Headphone jack, disconnect the cable.
- If you are still experiencing problems, use the Application Recovery CD(s) to reinstall the drivers. See Using the Application Recovery CD(s) for more information.

My volume dial control does not work.

- Your volume dial control will work only when the Volume icon is set to an audible level. Use the Volume icon to increase the volume.

  1. Double-click the Volume icon on the taskbar. The Volume Control window appears.
  2. In the Volume Control column, move the slider up to increase the volume. If Mute all is selected, click the check box to cancel it.

  ✍ Unlike the Volume icon, the volume dial control adjusts only the sound level from the speakers or headphones.

- You can also press Fn+F4 to increase the volume. If you double-click the Volume icon on the Windows® taskbar, you can view your changes on the Volume Control window.

✍ The Volume icon and Fn+F4 shortcuts will work only when the volume dial control is set to an audible level.

My microphone does not work.

If you are using an external microphone, make sure the microphone is plugged into the Microphone jack. See Connecting an External Microphone for more information.

Troubleshooting Memory Stick Media

I cannot open image files.

- If the Sony MemoryStick dialog box does not appear when you first insert a Memory Stick media, you can:

  1. Click Start, and then My Computer. The My Computer window appears.

  2. Click the Sony MemoryStick icon. If your images are not stored in a folder, your images should appear in the Sony MemoryStick window. Click the Left or Right arrows to view images. If your images are stored in a folder, open the folder to view your images.

- The format of your Memory Stick media may not be compatible with the software you are using to view your image files. When you reformat your Memory Stick media, you lose the images and data stored on that media. Copy the data from the Memory Stick media onto the hard disk drive of your computer to save your images and data. Reformat the Memory Stick media using Memory Stick Formatter software preinstalled on your computer. See Formatting Memory Stick media for more information.

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Memory Stick media does not work. I cannot access the removable drive.

To locate the Memory Stick media icon in your My Computer folder

1. Click the View menu, and select Refresh.
2. Wait a few moments for the computer to recognize the Memory Stick media.
3. Click the Sony MemoryStick icon.

I cannot print.

- Make sure the printer is on, and the printer cable is securely connected to both the printer and your computer.
- Make sure the printer is compatible with the Windows® operating system installed on your computer and that it has the correct printer drivers.
- Your connected printer may not function after the computer resumes from a power saving mode.
- The default setting for the printer port mode is correct for most printers. If you cannot print, try changing the printer port number.

    1. Click Start on the Windows taskbar, and then Control Panel.
    2. Click Performance and Maintenance, and then System. The System Properties dialog box appears.
    3. Select the Hardware tab, and click Device Manager. The Device Manager dialog box appears.
    4. Double-click Ports (COM&LPT), and then ECP Printer Port (LPT1).
    5. Select the Port Settings tab, and choose a different LPT Port Number.

To reset the printer connection

1. Click Start on the taskbar, and select Control Panel.
2. Click Printers and Other Hardware, and then click Printers and Faxes.
3. Right-click on the icon of the printer that is not functioning, and select Properties to open the Properties window.
4. Click OK.

Troubleshooting the Printer

I cannot print.

- Make sure the printer is on, and the printer cable is securely connected to both the printer and your computer.
- Make sure the printer is compatible with the Windows® operating system installed on your computer and that it has the correct printer drivers.
- Your connected printer may not function after the computer resumes from a power saving mode.
- The default setting for the printer port mode is correct for most printers. If you cannot print, try changing the printer port number.

    1. Click Start on the Windows taskbar, and then Control Panel.
    2. Click Performance and Maintenance, and then System. The System Properties dialog box appears.
    3. Select the Hardware tab, and click Device Manager. The Device Manager dialog box appears.
    4. Double-click Ports (COM&LPT), and then ECP Printer Port (LPT1).
    5. Select the Port Settings tab, and choose a different LPT Port Number.

To reset the printer connection

1. Click Start on the taskbar, and select Control Panel.
2. Click Printers and Other Hardware, and then click Printers and Faxes.
3. Right-click on the icon of the printer that is not functioning, and select Properties to open the Properties window.
4. Click OK.

Getting Help

Sony provides you with several support resources to answer questions about your VAIO® computer or the preinstalled software. Refer to these resources in the order they are listed.

Support Options

If you have questions about your computer or the preinstalled software, refer to the following sources for answers in the sequence listed below.

1 VAIO® Computer User Guide

The online VAIO® Computer User Guide and the printed VAIO® Computer Quick Start provide information on how to maximize your computer capabilities and solve common problems. You can also push the Help button located on the top right corner of your computer to access VAIO® Help and Support.

2 Software Manuals and Online Help Files

The software preinstalled on your computer may come with an online manual. These manuals are stored on the hard disk drive as online Help files. You can find the Help files from the Help menu under the specific software program. Some programs may come with a printed manual.

3 Operating System Online Support

Your computer comes preinstalled with a Microsoft® Windows® operating system. For operating system support, you can gain access to Microsoft® customer support at: http://support.microsoft.com/directory/.

4 VAIO Support Agent

You can find VAIO Support Agent by clicking Start and selecting Help and Support. Using advanced diagnostic technology, Sony's VAIO Support Agent runs scheduled protections of your programs, network settings, and other important program settings. When your software is protected, you can use VAIO Support Agent to repair software problems by restoring your software to any of the previously protected states.

5 Sony Computing Support

This service provides instant access to information on commonly encountered problems. Enter a description of your problem and the Knowledge Database searches for the corresponding solutions online. You can access Sony Computing Support at: http://www.sony.com/pcsupport.

6 Sony Fax-on-Demand

This service, which requires a fax machine or your fax software, provides answers to commonly asked questions. You can use this automated service to request a list of available topics, and select the topics that you want to receive. To contact the Sony fax-on-demand service, call: 1-888-4-SONY-PC (1-888-476-6972).

7 Sony Customer Support

Sony and Microsoft software support is available free of charge for 90 days after the original date of purchase. You can call and speak with a Sony Customer Support Representative without using your computer by calling: 1-888-4-SONY-PC (1-888-476-6972).

8 Sony Service Center

For the Sony Service Center nearest you, call 1-888-4-SONY-PC (1-888-476-6972) or find Sony Customer Service on the Web at http://www.sony.com/pcsupport.